

**Supplementary Table S1.** Transcripts Per Million (TPM) values of the expression of homologous genes in tested *Staphylococcus aureus* cultures under the following growth conditions: nc - negative control; ge - treated with gentamicin; cc - treated with iodine-containing complex CC-196; gecc - combinatorial treatment.

| Locus tag in <i>S. aureus</i> 150 | <i>S. aureus</i> 150 nc | <i>S. aureus</i> 150 ge | <i>S. aureus</i> 150 cc | <i>S. aureus</i> 150 gecc | <i>S. aureus</i> 597/z nc | <i>S. aureus</i> 597/z ge | <i>S. aureus</i> 597/z cc | <i>S. aureus</i> 597/z gecc | <i>S. aureus</i> 598 nc | <i>S. aureus</i> 598 ge | <i>S. aureus</i> 598 cc | <i>S. aureus</i> 598 gecc | <i>S. aureus</i> BAA39 nc | <i>S. aureus</i> BAA39 ge | <i>S. aureus</i> BAA39 cc | <i>S. aureus</i> BAA39 gecc | Gene name      | Annotation                                                                                      |
|-----------------------------------|-------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-----------------------------|-------------------------|-------------------------|-------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-----------------------------|----------------|-------------------------------------------------------------------------------------------------|
| NW338_00005                       | 260                     | 385                     | 124                     | 189                       | 210                       | 191                       | 193                       | 142                         | 298                     | 83                      | 32                      | 109                       | 345                       | 505                       | 252                       | 179                         | <i>dnaA</i>    | chromosomal replication initiator protein DnaA                                                  |
| NW338_00010                       | 165                     | 256                     | 138                     | 307                       | 279                       | 257                       | 252                       | 243                         | 564                     | 355                     | 149                     | 374                       | 544                       | 540                       | 230                       | 376                         | <i>dnaN</i>    | DNA polymerase III subunit beta                                                                 |
| NW338_00015                       | 840                     | 337                     | 368                     | 490                       | 717                       | 537                       | 420                       | 652                         | 460                     | 0                       | 438                     | 663                       | 499                       | 57                        | 1428                      | 585                         | <i>yaaA</i>    | S4 domain-containing protein YaaA                                                               |
| NW338_00020                       | 157                     | 449                     | 309                     | 335                       | 140                       | 310                       | 484                       | 244                         | 147                     | 228                     | 272                     | 252                       | 885                       | 808                       | 330                       | 697                         | <i>recF</i>    | DNA replication/repair protein RecF                                                             |
| NW338_00025                       | 458                     | 761                     | 592                     | 567                       | 534                       | 384                       | 1048                      | 740                         | 146                     | 220                     | 54                      | 235                       | 637                       | 615                       | 507                       | 868                         | <i>gyrB</i>    | DNA topoisomerase (ATP-hydrolyzing) subunit B                                                   |
| NW338_00030                       | 523                     | 631                     | 449                     | 543                       | 1128                      | 937                       | 1453                      | 1437                        | 572                     | 252                     | 299                     | 262                       | 491                       | 465                       | 395                       | 581                         | <i>gyrA</i>    | DNA gyrase subunit A                                                                            |
| NW338_00035                       | 351                     | 165                     | 398                     | 228                       | 689                       | 660                       | 505                       | 272                         | 286                     | 151                     | 184                     | 201                       | 0                         | 119                       | 160                       | 382                         | .              | NAD(P)H-hydrate dehydratase                                                                     |
| NW338_00040                       | 19                      | 63                      | 79                      | 8                         | 84                        | 26                        | 0                         | 6                           | 0                       | 0                       | 42                      | 0                         | 24                        | 104                       | 0                         | 8                           | <i>hutH</i>    | histidine ammonia-lyase                                                                         |
| NW338_00045                       | 1454                    | 1335                    | 615                     | 626                       | 836                       | 768                       | 199                       | 447                         | 0                       | 89                      | 32                      | 83                        | 86                        | 319                       | 0                         | 151                         | <i>serS</i>    | serine--tRNA ligase                                                                             |
| NW338_00050                       | 0                       | 0                       | 0                       | 121                       | 152                       | 176                       | 153                       | 213                         | 0                       | 0                       | 0                       | 0                         | 119                       | 0                         | 0                         | 0                           | .              | AzIC family ABC transporter permease                                                            |
| NW338_00055                       | 0                       | 29                      | 59                      | 0                         | 76                        | 37                        | 63                        | 96                          | 0                       | 0                       | 0                       | 0                         | 0                         | 41                        | 0                         | 205                         | .              | AzID domain-containing protein                                                                  |
| NW338_00060                       | 45                      | 16                      | 27                      | 116                       | 147                       | 22                        | 32                        | 88                          | 0                       | 16                      | 0                       | 25                        | 0                         | 0                         | 0                         | 70                          | .              | alpha/beta fold hydrolase family protein                                                        |
| NW338_00065                       | 126                     | 261                     | 249                     | 171                       | 206                       | 259                       | 249                       | 130                         | 65                      | 182                     | 227                     | 297                       | 230                       | 155                       | 188                       | 266                         | .              | Yyb5 family protein                                                                             |
| NW338_00070                       | 541                     | 486                     | 478                     | 630                       | 422                       | 582                       | 860                       | 696                         | 31                      | 79                      | 21                      | 210                       | 371                       | 261                       | 406                       | 320                         | <i>gdpP</i>    | cyclic-di-AMP phosphodiesterase GdpP                                                            |
| NW338_00075                       | 167                     | 656                     | 369                     | 551                       | 253                       | 300                       | 508                       | 756                         | 117                     | 111                     | 297                     | 109                       | 265                       | 91                        | 1362                      | 259                         | <i>rpmH</i>    | 50S ribosomal protein L9                                                                        |
| NW338_00080                       | 482                     | 721                     | 601                     | 863                       | 999                       | 706                       | 914                       | 1124                        | 457                     | 175                     | 196                     | 181                       | 579                       | 253                       | 131                       | 371                         | <i>dnaB</i>    | replicative DNA helicase                                                                        |
| NW338_00085                       | 22                      | 37                      | 76                      | 49                        | 98                        | 24                        | 126                       | 51                          | 140                     | 222                     | 380                     | 530                       | 64                        | 125                       | 0                         | 133                         | .              | adenylosuccinate synthase                                                                       |
| NW338_00100                       | 374                     | 540                     | 369                     | 324                       | 197                       | 158                       | 103                       | 247                         | 0                       | 0                       | 60                      | 267                       | 118                       | 39                        | 0                         | 254                         | <i>yycF</i>    | response regulator YycF                                                                         |
| NW338_00105                       | 438                     | 713                     | 471                     | 647                       | 685                       | 635                       | 793                       | 842                         | 61                      | 86                      | 203                     | 140                       | 161                       | 247                       | 196                       | 180                         | <i>walK</i>    | cell wall metabolism sensor histidine kinase WalK                                               |
| NW338_00110                       | 681                     | 580                     | 505                     | 422                       | 620                       | 595                       | 561                       | 605                         | 39                      | 128                     | 177                     | 156                       | 180                       | 81                        | 127                       | 61                          | <i>yycH</i>    | two-component system activity regulator YycH                                                    |
| NW338_00115                       | 339                     | 351                     | 367                     | 457                       | 129                       | 134                       | 78                        | 112                         | 208                     | 41                      | 159                     | 0                         | 302                       | 0                         | 0                         | 124                         | <i>yycI</i>    | two-component system regulatory protein YycI                                                    |
| NW338_00120                       | 0                       | 91                      | 106                     | 139                       | 321                       | 297                       | 142                       | 407                         | 147                     | 357                     | 166                     | 189                       | 44                        | 153                       | 217                       | 117                         | .              | MBL fold metallo-hydrolase                                                                      |
| NW338_00125                       | 225                     | 184                     | 214                     | 137                       | 154                       | 116                       | 37                        | 90                          | 23                      | 0                       | 0                       | 35                        | 15                        | 18                        | 0                         | 58                          | <i>adsA</i>    | LPXTG-anchored adenosine synthase AdsA                                                          |
| NW338_00130                       | 492                     | 352                     | 94                      | 345                       | 104                       | 123                       | 21                        | 0                           | 252                     | 67                      | 262                     | 51                        | 74                        | 299                       | 0                         | 241                         | <i>rlmH</i>    | 23S rRNA (pseudouridine(1915)-N(3))-methyltransferase                                           |
| NW338_00170                       | 388                     | 362                     | 872                     | 315                       | 477                       | 268                       | 814                       | 272                         | 53                      | 81                      | 548                     | 538                       | 91                        | 147                       | 390                       | 73                          | .              | RlmH                                                                                            |
| NW338_00180                       | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 70                          | 0                       | 0                       | 298                     | 82                        | 0                         | 0                         | 0                         | 0                           | .              | tRNA-dihydrouridine synthase                                                                    |
| NW338_00185                       | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 19                          | 87                      | 150                     | 147                     | 0                         | 59                        | 0                         | 0                         | 21                          | .              | TfoX/Sxy family protein                                                                         |
| NW338_00205                       | 0                       | 86                      | 101                     | 105                       | 0                         | 82                        | 43                        | 0                           | 0                       | 0                       | 0                       | 50                        | 0                         | 162                       | 0                         | 0                           | .              | hypothetical protein                                                                            |
| NW338_00210                       | 120                     | 196                     | 171                     | 158                       | 64                        | 21                        | 0                         | 10                          | 0                       | 0                       | 0                       | 25                        | 0                         | 108                       | 0                         | 0                           | .              | hypothetical protein                                                                            |
| NW338_00225                       | 13                      | 60                      | 81                      | 29                        | 85                        | 48                        | 41                        | 52                          | 0                       | 29                      | 0                       | 103                       | 0                         | 6                         | 41                        | 19                          | .              | phosphatidylinositol-specific phospholipase C                                                   |
| NW338_00230                       | 0                       | 51                      | 16                      | 47                        | 21                        | 26                        | 35                        | 10                          | 0                       | 0                       | 54                      | 0                         | 91                        | 12                        | 295                       | 26                          | .              | helix-turn-helix domain-containing protein                                                      |
| NW338_00235                       | 0                       | 57                      | 14                      | 20                        | 0                         | 28                        | 167                       | 45                          | 0                       | 12                      | 0                       | 81                        | 0                         | 10                        | 0                         | 75                          | <i>norC</i>    | M20 family metallopeptidase                                                                     |
| NW338_00245                       | 97                      | 31                      | 41                      | 130                       | 23                        | 20                        | 128                       | 168                         | 0                       | 84                      | 129                     | 60                        | 25                        | 19                        | 0                         | 142                         | .              | multidrug efflux MFS transporter NorC                                                           |
| NW338_00250                       | 149                     | 328                     | 62                      | 83                        | 93                        | 139                       | 17                        | 32                          | 286                     | 386                     | 468                     | 557                       | 20                        | 75                        | 0                         | 121                         | .              | Na/Pi cotransporter family protein                                                              |
| NW338_00255                       | 120                     | 34                      | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | 0                       | 0                       | 0                       | 51                        | 0                         | 108                       | 0                         | 116                         | .              | oleate hydratase                                                                                |
| NW338_00260                       | 18                      | 28                      | 116                     | 118                       | 106                       | 124                       | 32                        | 64                          | 144                     | 71                      | 52                      | 0                         | 81                        | 257                       | 58                        | 118                         | .              | DUF1648 domain-containing protein                                                               |
| NW338_00265                       | 1037                    | 743                     | 1113                    | 490                       | 850                       | 859                       | 706                       | 495                         | 928                     | 605                     | 601                     | 1116                      | 6445                      | 6796                      | 5867                      | 4364                        | <i>spa</i>     | L-lactate permease                                                                              |
| NW338_00270                       | 95                      | 64                      | 39                      | 62                        | 33                        | 63                        | 222                       | 26                          | 70                      | 554                     | 176                     | 644                       | 582                       | 96                        | 1429                      | 489                         | <i>sarS</i>    | staphylococcal protein A                                                                        |
| NW338_00275                       | 43                      | 57                      | 0                       | 0                         | 163                       | 46                        | 31                        | 81                          | 516                     | 614                     | 192                     | 225                       | 261                       | 107                       | 0                         | 162                         | <i>sirC</i>    | HTH-type transcriptional regulator SarS                                                         |
| NW338_00280                       | 0                       | 10                      | 0                       | 12                        | 0                         | 12                        | 10                        | 12                          | 53                      | 91                      | 0                       | 0                         | 0                         | 55                        | 0                         | 61                          | <i>sirB</i>    | staphyloferrin B ABC transporter permease subunit SirC                                          |
| NW338_00285                       | 0                       | 10                      | 19                      | 52                        | 170                       | 31                        | 21                        | 40                          | 0                       | 0                       | 0                       | 57                        | 0                         | 0                         | 0                         | 24                          | <i>sirA</i>    | staphyloferrin B ABC transporter permease subunit SirB                                          |
| NW338_00290                       | 0                       | 0                       | 0                       | 0                         | 25                        | 0                         | 11                        | 12                          | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | <i>sbnA</i>    | staphyloferrin B ABC transporter substrate-binding protein                                      |
| NW338_00295                       | 0                       | 0                       | 19                      | 30                        | 25                        | 24                        | 20                        | 20                          | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 18                          | <i>sbnB</i>    | SirA                                                                                            |
| NW338_00300                       | 0                       | 34                      | 0                       | 11                        | 0                         | 7                         | 6                         | 23                          | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 7                           | <i>sbnC</i>    | 2;3-diaminopropionate biosynthesis protein SbnA                                                 |
| NW338_00305                       | 0                       | 0                       | 0                       | 0                         | 0                         | 5                         | 0                         | 0                           | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | <i>sbnD</i>    | N-[(2S)-2-amino-2-carboxyethyl]-L-glutamate                                                     |
| NW338_00310                       | 0                       | 0                       | 0                       | 0                         | 0                         | 4                         | 0                         | 0                           | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | <i>sbnE</i>    | dehydrogenase SbnB                                                                              |
| NW338_00315                       | 0                       | 10                      | 0                       | 10                        | 21                        | 0                         | 46                        | 11                          | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 31                          | <i>sbnF</i>    | staphyloferrin B biosynthesis protein SbnC                                                      |
| NW338_00320                       | 0                       | 0                       | 0                       | 0                         | 32                        | 8                         | 91                        | 43                          | 0                       | 0                       | 0                       | 0                         | 0                         | 66                        | 0                         | 0                           | <i>sbnG</i>    | staphyloferrin B export MFS transporter                                                         |
| NW338_00325                       | 0                       | 16                      | 21                      | 11                        | 0                         | 0                         | 0                         | 40                          | 0                       | 0                       | 0                       | 0                         | 0                         | 11                        | 0                         | 0                           | <i>sbnH</i>    | L-2;3-diaminopropanoate--citrate ligase SbnE                                                    |
| NW338_00330                       | 0                       | 0                       | 0                       | 0                         | 88                        | 16                        | 92                        | 12                          | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | <i>sbnI</i>    | 3-(L-alanine-3-ylcarbamoyl)-2-[(2-aminoethylcarbamoyl)methyl]-2-hydroxypropanoate synthase SbnF |
| NW338_00335                       | 45                      | 0                       | 0                       | 0                         | 39                        | 0                         | 0                         | 0                           | 0                       | 25                      | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | .              | staphyloferrin B biosynthesis citrate synthase SbnG                                             |
| NW338_00340                       | 4613                    | 3524                    | 4927                    | 5560                      | 1139                      | 859                       | 2000                      | 2993                        | 1869                    | 1424                    | 953                     | 1826                      | 1161                      | 1615                      | 473                       | 2039                        | .              | staphyloferrin B biosynthesis decarboxylase SbnH                                                |
| NW338_00350                       | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | .              | bifunctional transcriptional regulator/O-phospho-L-serine synthase SbnI                         |
| NW338_00355                       | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | .              | MFS transporter                                                                                 |
| NW338_00360                       | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | 45                      | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | .              | (S)-acetoin forming diacetyl reductase                                                          |
| NW338_00365                       | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | .              | NAD-dependent epimerase/dehydratase family protein                                              |
| NW338_00370                       | 0                       | 0                       | 39                      | 0                         | 0                         | 0                         | 0                         | 0                           | 41                      | 0                       | 0                       | 39                        | 0                         | 0                         | 0                         | 0                           | .              | sugar transferase                                                                               |
| NW338_00375                       | 434                     | 537                     | 275                     | 395                       | 314                       | 500                       | 467                       | 498                         | 188                     | 189                     | 70                      | 381                       | 696                       | 610                       | 717                       | 517                         | .              | glycosyltransferase family 4 protein                                                            |
| NW338_00380                       | 3536                    | 2973                    | 1617                    | 1010                      | 265                       | 226                       | 320                       | 66                          | 767                     | 811                     | 577                     | 456                       | 754                       | 1743                      | 1086                      | 729                         | .              | O-antigen ligase family protein                                                                 |
| NW338_00390                       | 0                       | 13                      | 34                      | 89                        | 51                        | 65                        | 0                         | 12                          | 308                     | 194                     | 228                     | 133                       | 175                       | 405                       | 124                       | 168                         | .              | lipopolysaccharide biosynthesis protein                                                         |
| NW338_00395                       | 65                      | 50                      | 289                     | 332                       | 282                       | 263                       | 328                       | 295                         | 0                       | 23                      | 177                     | 0                         | 324                       | 406                       | 130                       | 320                         | <i>deoD</i>    | superoxide dismutase                                                                            |
| NW338_00400                       | 32                      | 47                      | 43                      | 85                        | 28                        | 106                       | 38                        | 67                          | 45                      | 0                       | 253                     | 96                        | 52                        | 10                        | 192                       | 58                          | <i>tet(38)</i> | hypothetical protein                                                                            |
| NW338_00405                       | 404                     | 374                     | 488                     | 558                       | 841                       | 1064                      | 1075                      | 1166                        | 326                     | 796                     | 1921                    | 1164                      | 178                       | 774                       | 401                       | 175                         | <i>deoC</i>    | GntR family transcriptional regulator                                                           |
| NW338_00410                       | 1409                    | 805                     | 682                     | 910                       | 636                       | 736                       | 988                       | 644                         | 1481                    | 1872                    | 1031                    | 1091                      | 1321                      | 1560                      | 1517                      | 945                         | <i>deoB</i>    | purine-nucleoside phosphorylase                                                                 |
| NW338_00415                       | 0                       | 23                      | 0                       | 46                        | 0                         | 0                         | 13                        | 24                          | 0                       | 0                       | 78                      | 30                        | 0                         | 0                         | 0                         | 0                           | <i>phnE</i>    | tetracycline efflux MFS transporter Tet(38)                                                     |
| NW338_00420                       | 0                       | 0                       | 0                       | 14                        | 31                        | 8                         | 13                        | 0                           | 76                      | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | <i>phnE</i>    | deoxyribose-phosphate aldolase                                                                  |
| NW338_00425                       | 120                     | 0                       | 25                      | 0                         | 0                         | 0                         | 13                        | 24                          | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 0                           | <i>phnC</i>    | phosphopentomutase                                                                              |
| NW338_00430                       | 0                       | 30                      | 0                       | 0                         | 0                         | 28                        | 0                         | 0                           | 0                       | 0                       | 0                       | 0                         | 0                         | 0                         | 0                         | 32                          | .              | phosphonate ABC transporter; permease protein PhnE                                              |
| NW338_00435                       | 0                       | 0                       | 0                       | 33                        | 0                         | 4                         | 7                         | 6                           | 0                       | 0                       | 0                       | 32                        | 0                         | 0                         | 0                         | 0                           | .              | phosphonate ABC transporter; permease protein PhnE                                              |
| NW338_00440                       | 130                     | 74                      | 148                     | 130                       | 145                       | 60                        | 0                         | 70                          | 39                      | 123                     | 56                      | 33                        | 0                         | 120                       | 0                         | 80                          | .              | phosphonate ABC transporter ATP-binding protein                                                 |
| NW338_00455                       | 1039                    | 680                     | 558                     | 557                       | 132                       | 92                        | 157                       | 89                          | 181                     | 37                      | 107                     | 137                       | 0                         | 20                        | 0                         | 10                          | <i>adhE</i>    | phosphate/phosphite/phosphonate ABC transporter                                                 |
| NW338_00460                       | 572                     | 138                     | 243                     | 124                       | 270                       | 210                       | 152                       | 125                         | 176                     | 527                     | 265                     | 75                        | 0                         | 77                        | 0                         | 27                          | <i>capA</i>    | substrate-binding protein                                                                       |
|                                   |                         |                         |                         |                           |                           |                           |                           |                             |                         |                         |                         |                           |                           |                           |                           |                             | .              | DNA-binding protein                                                                             |
|                                   |                         |                         |                         |                           |                           |                           |                           |                             |                         |                         |                         |                           |                           |                           |                           |                             | .              | bifunctional metallophosphatase/5'-nucleotidase                                                 |
|                                   |                         |                         |                         |                           |                           |                           |                           |                             |                         |                         |                         |                           |                           |                           |                           |                             | .              | bifunctional acetaldehyde-CoA/alcohol dehydrogenase                                             |
|                                   |                         |                         |                         |                           |                           |                           |                           |                             |                         |                         |                         |                           |                           |                           |                           |                             | .              | capsular polysaccharide type 5/8 biosynthesis protein CapA                                      |

|             |       |       |       |       |      |      |      |      |       |       |       |       |      |      |      |      |              |                                                                                |
|-------------|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|--------------|--------------------------------------------------------------------------------|
| NW338_00465 | 353   | 278   | 156   | 156   | 305  | 276  | 426  | 200  | 165   | 298   | 286   | 106   | 0    | 0    | 0    | 80   | <i>cap8B</i> | type 8 capsular polysaccharide synthesis protein Cap8B                         |
| NW338_00470 | 192   | 96    | 25    | 119   | 221  | 113  | 92   | 82   | 69    | 150   | 113   | 130   | 61   | 36   | 0    | 40   | <i>cap8C</i> | type 8 capsular polysaccharide synthesis protein Cap8C                         |
| NW338_00475 | 71    | 154   | 211   | 186   | 362  | 199  | 64   | 162  | 126   | 26    | 92    | 160   | 0    | 24   | 81   | 48   | <i>cap8D</i> | type 8 capsular polysaccharide synthesis protein Cap8D                         |
| NW338_00480 | 181   | 282   | 148   | 156   | 352  | 109  | 79   | 18   | 51    | 183   | 206   | 0     | 0    | 0    | 0    | 82   | <i>cap8E</i> | type 8 capsular polysaccharide synthesis protein Cap8E                         |
| NW338_00485 | 251   | 278   | 342   | 186   | 232  | 72   | 0    | 98   | 0     | 96    | 254   | 96    | 0    | 0    | 0    | 11   | <i>cap8F</i> | type 8 capsular polysaccharide synthesis protein Cap8F                         |
| NW338_00490 | 130   | 230   | 124   | 93    | 251  | 359  | 327  | 155  | 198   | 71    | 189   | 277   | 32   | 58   | 82   | 0    | <i>cap8G</i> | type 8 capsular polysaccharide synthesis protein Cap8G                         |
| NW338_00515 | 267   | 224   | 91    | 150   | 239  | 147  | 114  | 62   | 0     | 68    | 0     | 62    | 0    | 0    | 0    | 0    | <i>cap8L</i> | type 8 capsular polysaccharide synthesis protein Cap8L                         |
| NW338_00520 | 102   | 257   | 81    | 46    | 310  | 163  | 37   | 141  | 217   | 29    | 79    | 202   | 0    | 92   | 0    | 98   | <i>cap8M</i> | type 8 capsular polysaccharide synthesis protein Cap8M                         |
| NW338_00525 | 334   | 194   | 62    | 21    | 218  | 97   | 46   | 139  | 450   | 138   | 119   | 63    | 0    | 15   | 0    | 40   | <i>capN</i>  | capsular polysaccharide type 5/8 biosynthesis epimerase CapN                   |
| NW338_00530 | 141   | 167   | 149   | 42    | 223  | 153  | 97   | 145  | 269   | 39    | 118   | 85    | 0    | 0    | 138  | 24   | <i>cap8O</i> | type 8 capsular polysaccharide synthesis protein Cap8O                         |
| NW338_00535 | 397   | 386   | 122   | 188   | 315  | 145  | 99   | 213  | 256   | 85    | 263   | 169   | 0    | 209  | 0    | 60   | <i>cap8P</i> | type 8 capsular polysaccharide synthesis protein Cap8P                         |
| NW338_00540 | 87    | 136   | 79    | 71    | 0    | 0    | 32   | 72   | 161   | 0     | 194   | 0     | 0    | 42   | 0    | 132  | <i>isdI</i>  | staphylobilin-forming heme oxygenase IsdI                                      |
| NW338_00545 | 0     | 74    | 0     | 49    | 199  | 108  | 314  | 0    | 0     | 0     | 0     | 0     | 0    | 35   | 0    | 33   | .            | YbaN family protein                                                            |
| NW338_00550 | 349   | 251   | 524   | 573   | 303  | 252  | 112  | 195  | 151   | 87    | 256   | 190   | 531  | 629  | 536  | 1052 | .            | aldehyde dehydrogenase family protein                                          |
| NW338_00555 | 0     | 33    | 31    | 48    | 0    | 72   | 0    | 0    | 126   | 256   | 176   | 273   | 49   | 14   | 0    | 82   | .            | cation diffusion facilitator family transporter                                |
| NW338_00560 | 0     | 47    | 0     | 92    | 0    | 0    | 0    | 0    | 1349  | 393   | 627   | 1583  | 0    | 0    | 0    | 0    | .            | hypothetical protein                                                           |
| NW338_00565 | 0     | 0     | 75    | 99    | 206  | 77   | 40   | 163  | 0     | 0     | 0     | 0     | 0    | 127  | 0    | 50   | .            | DUF4242 domain-containing protein                                              |
| NW338_00570 | 0     | 0     | 80    | 25    | 0    | 44   | 130  | 124  | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 17   | .            | ABC transporter ATP-binding protein                                            |
| NW338_00575 | 0     | 0     | 50    | 0     | 167  | 161  | 162  | 190  | 0     | 0     | 43    | 0     | 0    | 0    | 0    | 69   | .            | ABC transporter substrate-binding protein                                      |
| NW338_00580 | 98    | 21    | 0     | 43    | 0    | 43   | 13   | 46   | 0     | 0     | 0     | 32    | 0    | 36   | 0    | 0    | .            | ABC transporter permease                                                       |
| NW338_00585 | 28    | 9     | 19    | 58    | 73   | 58   | 30   | 48   | 0     | 0     | 49    | 34    | 245  | 0    | 95   | .    | .            | acyl-CoA/acyl-ACP dehydrogenase                                                |
| NW338_00600 | 57    | 36    | 101   | 56    | 51   | 0    | 16   | 33   | 0     | 0     | 35    | 0     | 0    | 0    | 0    | 20   | .            | MFS transporter                                                                |
| NW338_00605 | 280   | 344   | 204   | 255   | 64   | 63   | 80   | 68   | 53    | 109   | 74    | 135   | 121  | 175  | 241  | 133  | .            | non-ribosomal peptide synthetase                                               |
| NW338_00610 | 211   | 272   | 332   | 336   | 221  | 172  | 0    | 78   | 175   | 50    | 198   | 116   | 55   | 42   | 0    | 95   | .            | 4'-phosphopantetheinyl transferase superfamily protein                         |
| NW338_00615 | 1088  | 1240  | 634   | 550   | 508  | 893  | 212  | 299  | 594   | 323   | 1029  | 1008  | 344  | 877  | 192  | 265  | .            | YagU family protein                                                            |
| NW338_00620 | 0     | 12    | 68    | 0     | 0    | 54   | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 18   | 0    | 17   | <i>argB</i>  | acetylglutamate kinase                                                         |
| NW338_00625 | 0     | 21    | 47    | 30    | 0    | 0    | 61   | 25   | 0     | 0     | 0     | 0     | 89   | 0    | 0    | 0    | <i>argJ</i>  | bifunctional glutamate N-acetyltransferase/amino-acid acetyltransferase ArgJ   |
| NW338_00635 | 0     | 13    | 16    | 10    | 0    | 0    | 72   | 0    | 0     | 0     | 0     | 0     | 30   | 0    | 0    | 0    | <i>rocD</i>  | ornithine--oxo-acid transaminase                                               |
| NW338_00640 | 68    | 23    | 36    | 24    | 18   | 49   | 8    | 14   | 0     | 12    | 78    | 36    | 70   | 10   | 256  | 19   | <i>brnQ</i>  | branched-chain amino acid transport system II carrier protein                  |
| NW338_00645 | 263   | 354   | 280   | 254   | 69   | 71   | 135  | 0    | 425   | 883   | 686   | 457   | 0    | 49   | 0    | 121  | .            | isochorismatase family protein                                                 |
| NW338_00650 | 281   | 181   | 206   | 105   | 85   | 83   | 154  | 37   | 68    | 55    | 0     | 99    | 50   | 96   | 162  | 82   | .            | alpha-keto acid decarboxylase family protein                                   |
| NW338_00660 | 72    | 181   | 97    | 107   | 74   | 238  | 164  | 197  | 29    | 16    | 73    | 28    | 367  | 178  | 54   | 425  | <i>ptsG</i>  | glucose-specific PTS transporter subunit IIBC                                  |
| NW338_00665 | 713   | 632   | 398   | 231   | 172  | 50   | 10   | 27   | 0     | 46    | 142   | 261   | 0    | 113  | 494  | 24   | .            | DUF871 domain-containing protein                                               |
| NW338_00670 | 741   | 490   | 184   | 247   | 289  | 72   | 11   | 26   | 0     | 36    | 287   | 54    | 0    | 61   | 195  | 141  | <i>murG</i>  | N-acetylmuramic acid 6-phosphate etherase                                      |
| NW338_00675 | 518   | 560   | 344   | 242   | 0    | 76   | 108  | 36   | 81    | 22    | 59    | 157   | 24   | 47   | 0    | 106  | .            | PTS transporter subunit EIIc                                                   |
| NW338_00680 | 579   | 254   | 238   | 148   | 72   | 21   | 0    | 24   | 120   | 37    | 0     | 143   | 53   | 31   | 193  | 84   | .            | MurK/RpiR family transcriptional regulator                                     |
| NW338_00690 | 223   | 119   | 126   | 63    | 146  | 134  | 36   | 29   | 143   | 41    | 54    | 26    | 55   | 123  | 0    | 101  | .            | type I restriction endonuclease subunit R                                      |
| NW338_00710 | 27    | 22    | 77    | 67    | 0    | 45   | 32   | 63   | 0     | 10    | 40    | 35    | 169  | 78   | 0    | 52   | .            | ABC transporter ATP-binding protein                                            |
| NW338_00715 | 0     | 11    | 13    | 31    | 17   | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 12   | .            | ABC transporter permease                                                       |
| NW338_00720 | 0     | 8     | 0     | 46    | 0    | 18   | 9    | 33   | 0     | 0     | 0     | 0     | 0    | 44   | 0    | 0    | .            | ABC transporter permease                                                       |
| NW338_00725 | 16    | 27    | 11    | 30    | 22   | 12   | 0    | 13   | 0     | 0     | 0     | 0     | 93   | 8    | 98   | 7    | .            | ABC transporter substrate-binding protein                                      |
| NW338_00730 | 0     | 30    | 32    | 64    | 12   | 43   | 63   | 52   | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 27   | <i>ggt</i>   | gamma-glutamyltransferase                                                      |
| NW338_00740 | 0     | 51    | 310   | 296   | 0    | 105  | 513  | 1300 | 0     | 0     | 101   | 0     | 0    | 0    | 0    | 0    | .            | FMN-dependent NADH-azoreductase                                                |
| NW338_00745 | 0     | 66    | 89    | 188   | 0    | 47   | 140  | 179  | 91    | 28    | 109   | 84    | 301  | 87   | 156  | 93   | .            | M23 family metalloproteinase                                                   |
| NW338_00750 | 0     | 17    | 27    | 17    | 211  | 41   | 0    | 0    | 0     | 0     | 38    | 22    | 32   | 0    | 0    | 16   | <i>ugpC</i>  | sn-glycerol-3-phosphate ABC transporter ATP-binding protein UgpC               |
| NW338_00755 | 0     | 83    | 77    | 51    | 103  | 95   | 0    | 23   | 41    | 0     | 0     | 0     | 0    | 0    | 0    | 24   | .            | maltodextrin ABC transporter substrate-binding protein                         |
| NW338_00760 | 501   | 201   | 135   | 176   | 163  | 52   | 92   | 48   | 48    | 39    | 100   | 19    | 0    | 11   | 72   | 14   | .            | ABC transporter permease subunit                                               |
| NW338_00765 | 174   | 262   | 181   | 85    | 46   | 15   | 0    | 0    | 0     | 0     | 53    | 29    | 0    | 16   | 0    | 15   | .            | sugar ABC transporter permease                                                 |
| NW338_00770 | 418   | 721   | 307   | 311   | 82   | 103  | 48   | 160  | 49    | 46    | 0     | 47    | 44   | 48   | 0    | 100  | .            | Gfo/Idh/MocA family oxidoreductase                                             |
| NW338_00775 | 630   | 382   | 199   | 189   | 227  | 90   | 78   | 68   | 0     | 0     | 0     | 0     | 0    | 13   | 0    | 17   | .            | Gfo/Idh/MocA family oxidoreductase                                             |
| NW338_00780 | 543   | 703   | 286   | 297   | 327  | 166  | 32   | 119  | 177   | 16    | 43    | 25    | 37   | 109  | 274  | 45   | .            | sugar phosphate isomerase/epimerase                                            |
| NW338_00785 | 0     | 0     | 0     | 23    | 0    | 55   | 21   | 38   | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 113  | .            | isoprenylcysteine carboxyl methyltransferase family protein                    |
| NW338_00790 | 171   | 422   | 82    | 424   | 250  | 191  | 7    | 22   | 114   | 59    | 64    | 0     | 226  | 163  | 189  | 102  | <i>uhpT</i>  | hexose-6-phosphate:phosphate antiporter                                        |
| NW338_00795 | 0     | 105   | 34    | 61    | 33   | 24   | 0    | 16   | 0     | 0     | 110   | 106   | 107  | 88   | 0    | 135  | .            | response regulator transcription factor                                        |
| NW338_00800 | 48    | 12    | 56    | 0     | 0    | 4    | 0    | 0    | 0     | 10    | 28    | 0     | 0    | 0    | 0    | 0    | .            | sensor histidine kinase                                                        |
| NW338_00805 | 59    | 69    | 20    | 43    | 0    | 0    | 0    | 10   | 0     | 0     | 111   | 52    | 116  | 169  | 0    | 77   | .            | ABC transporter substrate-binding protein                                      |
| NW338_00810 | 22442 | 18519 | 10569 | 9477  | 5555 | 7381 | 4211 | 4713 | 2368  | 2629  | 2460  | 4017  | 1942 | 2677 | 2170 | 2870 | <i>pflB</i>  | formate C-acetyltransferase                                                    |
| NW338_00815 | 22171 | 19979 | 14959 | 11062 | 8284 | 9937 | 5258 | 6848 | 56929 | 58037 | 28806 | 27591 | 1395 | 2862 | 2667 | 4069 | <i>pflA</i>  | pyruvate formate-lyase-activating protein                                      |
| NW338_00820 | 115   | 119   | 87    | 97    | 115  | 105  | 54   | 38   | 33    | 55    | 192   | 193   | 0    | 95   | 52   | 116  | .            | glycerophosphoryl diester phosphodiesterase membrane domain-containing protein |
| NW338_00825 | 0     | 0     | 0     | 168   | 0    | 113  | 30   | 62   | 346   | 46    | 485   | 680   | 1020 | 346  | 0    | 395  | .            | complement inhibitor SCIN                                                      |
| NW338_00830 | 0     | 0     | 22    | 39    | 44   | 10   | 15   | 9    | 0     | 0     | 0     | 115   | 17   | 94   | 166  | 90   | <i>coa</i>   | staphylocoagulase                                                              |
| NW338_00840 | 39    | 16    | 0     | 21    | 65   | 5    | 0    | 37   | 0     | 0     | 0     | 0     | 60   | 11   | 78   | 126  | .            | thiolase family protein                                                        |
| NW338_00845 | 0     | 7     | 0     | 12    | 0    | 9    | 0    | 15   | 27    | 14    | 28    | 70    | 114  | 29   | 190  | 58   | .            | 3-hydroxyacyl-CoA dehydrogenase/enoyl-CoA hydratase family protein             |
| NW338_00850 | 0     | 26    | 24    | 0     | 32   | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 39   | 0    | 0    | 52   | .            | acyl-CoA dehydrogenase family protein                                          |
| NW338_00855 | 0     | 0     | 0     | 0     | 0    | 0    | 47   | 0    | 40    | 0     | 0     | 0     | 0    | 0    | 0    | 53   | .            | acyl-CoA ligase                                                                |
| NW338_00860 | 0     | 6     | 12    | 0     | 43   | 13   | 26   | 0    | 109   | 10    | 80    | 47    | 57   | 56   | 0    | 72   | .            | acyl CoA:acetate/3-ketoacid CoA transferase                                    |
| NW338_00865 | 50    | 0     | 34    | 0     | 55   | 29   | 0    | 70   | 0     | 14    | 39    | 0     | 0    | 0    | 138  | 59   | .            | PrsW family intramembrane metalloprotease                                      |
| NW338_00870 | 160   | 24    | 88    | 49    | 43   | 85   | 14   | 57   | 0     | 11    | 73    | 127   | 37   | 51   | 0    | 0    | .            | ABC transporter substrate-binding protein                                      |
| NW338_00875 | 0     | 0     | 155   | 65    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 141   | 0    | 38   | 0    | 36   | .            | DUF488 domain-containing protein                                               |
| NW338_00880 | 164   | 110   | 901   | 749   | 364  | 309  | 59   | 203  | 348   | 1037  | 1485  | 2252  | 0    | 156  | 1972 | 102  | .            | hypothetical protein                                                           |
| NW338_00885 | 887   | 545   | 919   | 663   | 835  | 1032 | 402  | 518  | 288   | 198   | 150   | 234   | 214  | 576  | 386  | 564  | .            | FAD-binding oxidoreductase                                                     |
| NW338_00895 | 11413 | 10853 | 6933  | 5155  | 3753 | 6582 | 3240 | 2109 | 1564  | 1323  | 1416  | 1827  | 1623 | 1351 | 1565 | 1908 | .            | L-lactate dehydrogenase                                                        |
| NW338_00905 | 37    | 81    | 98    | 29    | 33   | 29   | 152  | 21   | 0     | 53    | 0     | 0     | 23   | 43   | 172  | 17   | .            | PTS transporter subunit EIIC                                                   |
| NW338_00910 | 46    | 99    | 219   | 130   | 68   | 55   | 11   | 13   | 56    | 97    | 0     | 138   | 0    | 128  | 0    | 0    | .            | nucleoside hydrolase                                                           |
| NW338_00920 | 0     | 0     | 9     | 0     | 0    | 0    | 0    | 0    | 6     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | .            | BglG family transcription antiterminator                                       |
| NW338_00925 | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 20   | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | .            | PTS sugar transporter subunit IIA                                              |
| NW338_00930 | 0     | 34    | 0     | 0     | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 46   | .            | PTS sugar transporter subunit IIB                                              |
| NW338_00935 | 0     | 0     | 0     | 0     | 20   | 0    | 8    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | .            | PTS galactitol transporter subunit IIC                                         |
| NW338_00940 | 41    | 0     | 0     | 0     | 36   | 0    | 0    | 9    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | .            | zinc-binding dehydrogenase                                                     |
| NW338_00950 | 0     | 0     | 28    | 38    | 0    | 0    | 10   | 0    | 0     | 0     | 48    | 34    | 0    | 0    | 0    | 0    | .            | galactitol-1-phosphate 5-dehydrogenase                                         |

|             |       |      |      |      |       |       |       |       |      |      |      |      |      |      |      |      |             |                                                           |
|-------------|-------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------------|-----------------------------------------------------------|
| NW338_00955 | 234   | 89   | 95   | 143  | 359   | 303   | 58    | 98    | 82   | 114  | 0    | 0    | 50   | 358  | 256  | 101  | .           | 2-C-methyl-D-erythritol 4-phosphate cytidyllyltransferase |
| NW338_00960 | 146   | 87   | 57   | 99   | 86    | 224   | 94    | 127   | 153  | 0    | 43   | 0    | 69   | 193  | 165  | 95   | .           | alcohol dehydrogenase catalytic domain-containing protein |
| NW338_00965 | 61    | 169  | 102  | 115  | 106   | 94    | 36    | 94    | 0    | 77   | 0    | 92   | 71   | 23   | 79   | 74   | .           | CDP-glycerol glycerophosphotransferase family protein     |
| NW338_00970 | 24    | 46   | 119  | 87   | 97    | 191   | 138   | 180   | 45   | 0    | 0    | 112  | 40   | 111  | 223  | 15   | .           | CDP-glycerol glycerophosphotransferase family protein     |
| NW338_00975 | 125   | 49   | 241  | 188  | 270   | 313   | 321   | 356   | 84   | 134  | 178  | 321  | 352  | 181  | 472  | 71   | .           | D-ribitol 5-phosphate cytidyllyltransferase               |
| NW338_00980 | 202   | 127  | 120  | 448  | 110   | 368   | 330   | 270   | 115  | 94   | 167  | 104  | 143  | 40   | 679  | 172  | .           | ribitol-5-phosphate dehydrogenase                         |
| NW338_00985 | 454   | 319  | 341  | 389  | 409   | 348   | 570   | 645   | 165  | 9    | 26   | 97   | 70   | 54   | 200  | 192  | .           | CDP-glycerol glycerophosphotransferase family protein     |
| NW338_00990 | 513   | 775  | 928  | 634  | 677   | 616   | 555   | 893   | 222  | 561  | 431  | 223  | 394  | 635  | 466  | 480  | <i>tarS</i> | poly(ribitol-phosphate) beta-N-                           |
| NW338_00995 | 42    | 212  | 264  | 51   | 131   | 330   | 46    | 123   | 687  | 376  | 604  | 506  | 315  | 0    | 666  | 183  | <i>scdA</i> | acetylglucosaminyltransferase                             |
| NW338_01000 | 124   | 167  | 198  | 426  | 581   | 256   | 216   | 207   | 30   | 0    | 25   | 56   | 122  | 127  | 52   | 27   | .           | iron-sulfur cluster repair di-iron protein ScdA           |
| NW338_01005 | 101   | 138  | 26   | 53   | 91    | 8     | 109   | 0     | 475  | 543  | 287  | 233  | 0    | 194  | 235  | 24   | .           | sensor histidine kinase                                   |
| NW338_01010 | 1306  | 3389 | 965  | 1255 | 2069  | 1993  | 515   | 489   | 915  | 698  | 143  | 464  | 325  | 366  | 596  | 250  | <i>IrgA</i> | response regulator transcription factor LytR              |
| NW338_01015 | 5828  | 8855 | 3651 | 4845 | 5797  | 5961  | 2011  | 1816  | 2317 | 2898 | 1185 | 1512 | 5494 | 5894 | 2506 | 4180 | <i>IrgB</i> | antiholin-like murein hydrolase modulator LrgA            |
| NW338_01020 | 40    | 27   | 97   | 149  | 0     | 95    | 29    | 82    | 255  | 23   | 638  | 138  | 184  | 151  | 0    | 285  | .           | antiholin-like protein LrgB                               |
| NW338_01025 | 0     | 32   | 0    | 41   | 0     | 92    | 141   | 128   | 0    | 0    | 0    | 31   | 0    | 134  | 0    | 0    | .           | GntR family transcriptional regulator                     |
| NW338_01030 | 136   | 102  | 101  | 118  | 44    | 79    | 114   | 262   | 83   | 80   | 75   | 39   | 77   | 9    | 0    | 47   | .           | glucose PTS transporter subunit IIA                       |
| NW338_01035 | 0     | 13   | 39   | 18   | 0     | 28    | 0     | 15    | 80   | 140  | 58   | 32   | 0    | 67   | 0    | 0    | .           | 6-phospho-beta-glucosidase                                |
| NW338_01045 | 548   | 435  | 214  | 249  | 166   | 105   | 276   | 247   | 0    | 53   | 46   | 27   | 62   | 54   | 223  | 104  | <i>rbsK</i> | class I SAM-dependent methyltransferase                   |
| NW338_01050 | 370   | 95   | 96   | 103  | 345   | 265   | 387   | 49    | 0    | 40   | 0    | 60   | 0    | 0    | 0    | 31   | <i>rbsD</i> | ribokinase                                                |
| NW338_01055 | 329   | 188  | 95   | 186  | 0     | 140   | 12    | 48    | 0    | 0    | 100  | 28   | 0    | 45   | 0    | 0    | <i>rbsU</i> | D-ribose pyranase                                         |
| NW338_01060 | 72    | 89   | 49   | 75   | 223   | 109   | 0     | 93    | 0    | 32   | 169  | 49   | 36   | 106  | 0    | 129  | .           | ribose transporter RbsU                                   |
| NW338_01075 | 0     | 0    | 0    | 10   | 0     | 33    | 15    | 37    | 38   | 0    | 0    | 0    | 0    | 47   | 0    | 0    | .           | LacI family transcriptional regulator                     |
| NW338_01080 | 0     | 58   | 26   | 33   | 25    | 20    | 0     | 0     | 0    | 0    | 0    | 24   | 47   | 52   | 0    | 86   | .           | MFS transporter                                           |
| NW338_01085 | 0     | 50   | 27   | 53   | 107   | 100   | 239   | 238   | 0    | 0    | 67   | 0    | 87   | 14   | 0    | 69   | <i>lytM</i> | linear amide C-N hydrolase                                |
| NW338_01095 | 0     | 17   | 0    | 0    | 100   | 20    | 0     | 34    | 114  | 116  | 45   | 26   | 0    | 0    | 0    | 0    | .           | glycine-glycine endopeptidase LytM                        |
| NW338_01100 | 0     | 0    | 17   | 0    | 0     | 47    | 0     | 0     | 0    | 41   | 0    | 90   | 71   | 0    | 0    | 0    | .           | ABC transporter permease                                  |
| NW338_01105 | 66    | 6    | 13   | 8    | 58    | 70    | 13    | 34    | 190  | 285  | 154  | 82   | 31   | 27   | 336  | 35   | .           | ABC transporter permease                                  |
| NW338_01110 | 0     | 0    | 40   | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 38   | 0    | 0    | 0    | 0    | .           | hypothetical protein                                      |
| NW338_01120 | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 50    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .           | DUF5079 family protein                                    |
| NW338_01125 | 0     | 32   | 22   | 49   | 43    | 95    | 288   | 82    | 324  | 91   | 71   | 0    | 0    | 57   | 0    | 0    | .           | DUF5080 family protein                                    |
| NW338_01130 | 11535 | 9533 | 6994 | 6089 | 17050 | 23128 | 10532 | 11199 | 5221 | 6616 | 6097 | 3925 | 3421 | 3491 | 2071 | 3678 | <i>esxA</i> | CHAP domain-containing protein                            |
| NW338_01135 | 48    | 93   | 61   | 60   | 277   | 145   | 92    | 54    | 40   | 0    | 0    | 19   | 17   | 5    | 0    | 25   | <i>esxA</i> | WXG100 family type VII secretion effector EsxA            |
| NW338_01140 | 0     | 187  | 0    | 91   | 368   | 203   | 45    | 115   | 631  | 140  | 138  | 445  | 250  | 48   | 0    | 0    | <i>esxA</i> | type VII secretion protein EsxA                           |
| NW338_01145 | 0     | 0    | 0    | 47   | 418   | 87    | 353   | 87    | 0    | 0    | 0    | 100  | 0    | 0    | 0    | 0    | <i>esxB</i> | type VII secretion protein EsA                            |
| NW338_01150 | 77    | 12   | 14   | 9    | 123   | 122   | 31    | 30    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>esxB</i> | type VII secretion protein EsB                            |
| NW338_01155 | 115   | 108  | 38   | 103  | 250   | 169   | 114   | 128   | 0    | 24   | 10   | 11   | 8    | 3    | 0    | 21   | <i>essC</i> | type VII secretion protein EssC                           |
| NW338_01185 | 174   | 362  | 191  | 222  | 53    | 203   | 66    | 20    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .           | TIGR01741 family protein                                  |
| NW338_01265 | 0     | 0    | 0    | 0    | 50    | 0     | 302   | 98    | 124  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .           | TIGR01741 family protein                                  |
| NW338_01280 | 71    | 152  | 301  | 123  | 688   | 431   | 332   | 301   | 304  | 227  | 0    | 141  | 0    | 43   | 0    | 56   | .           | DUF4064 domain-containing protein                         |
| NW338_01285 | 0     | 278  | 118  | 59   | 121   | 95    | 12    | 24    | 0    | 0    | 257  | 29   | 43   | 16   | 0    | 66   | .           | formate/nitrite transporter family protein                |
| NW338_01290 | 55    | 70   | 202  | 372  | 90    | 14    | 123   | 47    | 0    | 0    | 82   | 176  | 30   | 12   | 0    | 420  | <i>brnQ</i> | branched-chain amino acid transport system II carrier     |
| NW338_01295 | 0     | 54   | 80   | 34   | 547   | 223   | 91    | 143   | 323  | 72   | 235  | 202  | 203  | 171  | 0    | 111  | .           | protein                                                   |
| NW338_01300 | 68    | 94   | 43   | 113  | 73    | 138   | 10    | 37    | 106  | 93   | 120  | 54   | 0    | 62   | 87   | 58   | .           | 5'-nucleotidase; lipoprotein e(P4) family                 |
| NW338_01305 | 344   | 70   | 139  | 0    | 167   | 106   | 127   | 85    | 164  | 158  | 62   | 36   | 0    | 291  | 0    | 104  | .           | FtsX-like permease family protein                         |
| NW338_01315 | 0     | 16   | 78   | 12   | 89    | 83    | 143   | 105   | 0    | 16   | 43   | 72   | 46   | 139  | 168  | 121  | .           | ABC transporter ATP-binding protein                       |
| NW338_01325 | 0     | 0    | 0    | 15   | 0     | 0     | 0     | 0     | 57   | 17   | 0    | 116  | 0    | 29   | 0    | 0    | .           | PTS sugar transporter subunit IIC                         |
| NW338_01330 | 38    | 0    | 24   | 0    | 0     | 0     | 8     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .           | pseudouridine-5'-phosphate glycosidase                    |
| NW338_01335 | 86    | 54   | 81   | 12   | 0     | 17    | 0     | 0     | 73   | 85   | 83   | 73   | 44   | 99   | 0    | 109  | .           | NupC/NupG family nucleoside CNT transporter               |
| NW338_01340 | 49    | 126  | 51   | 58   | 0     | 7     | 12    | 21    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .           | sodium:solute symporter                                   |
| NW338_01345 | 150   | 104  | 117  | 87   | 107   | 14    | 0     | 0     | 0    | 0    | 0    | 0    | 52   | 0    | 0    | 14   | .           | N-acetylneuraminate lyase                                 |
| NW338_01355 | 0     | 38   | 88   | 21   | 0     | 9     | 0     | 14    | 0    | 0    | 0    | 0    | 53   | 0    | 0    | 0    | .           | ROK family protein                                        |
| NW338_01360 | 0     | 0    | 15   | 0    | 0     | 0     | 0     | 0     | 85   | 38   | 0    | 0    | 34   | 10   | 0    | 0    | .           | N-acetylmannosamine-6-phosphate 2-epimerase               |
| NW338_01365 | 704   | 496  | 385  | 413  | 281   | 148   | 40    | 132   | 434  | 649  | 496  | 705  | 241  | 236  | 628  | 122  | <i>lip2</i> | YjiH family protein                                       |
| NW338_01370 | 0     | 0    | 31   | 45   | 30    | 45    | 25    | 38    | 0    | 19   | 0    | 29   | 43   | 16   | 111  | 15   | .           | YSIRK domain-containing triacylglycerol lipase Lip2/Geh   |
| NW338_01375 | 0     | 32   | 22   | 54   | 0     | 20    | 71    | 10    | 0    | 0    | 36   | 40   | 45   | 0    | 216  | 16   | .           | alpha/beta hydrolase                                      |
| NW338_01385 | 28    | 48   | 55   | 37   | 63    | 58    | 51    | 61    | 0    | 0    | 56   | 35   | 41   | 173  | 30   | .    | .           | NADH-dependent flavin oxidoreductase                      |
| NW338_01390 | 0     | 0    | 174  | 0    | 0     | 126   | 0     | 88    | 0    | 48   | 0    | 0    | 0    | 154  | 0    | 76   | .           | LLM class flavin-dependent oxidoreductase                 |
| NW338_01395 | 36    | 84   | 61   | 87   | 95    | 42    | 140   | 106   | 0    | 0    | 0    | 0    | 59   | 17   | 0    | 32   | .           | glycine cleavage system protein H                         |
| NW338_01400 | 0     | 10   | 96   | 59   | 40    | 57    | 33    | 22    | 0    | 0    | 114  | 0    | 0    | 29   | 97   | 32   | .           | protein-ADP-ribose hydrolase                              |
| NW338_01405 | 0     | 47   | 83   | 77   | 37    | 18    | 20    | 19    | 0    | 48   | 41   | 0    | 109  | 13   | 0    | 0    | .           | NAD-dependent deacetylase                                 |
| NW338_01415 | 257   | 144  | 121  | 48   | 57    | 9     | 0     | 9     | 45   | 36   | 47   | 0    | 60   | 65   | 0    | 45   | .           | lipocate--protein ligase                                  |
| NW338_01420 | 0     | 123  | 91   | 89   | 0     | 0     | 36    | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .           | PTS ascorbate transporter subunit IIC                     |
| NW338_01425 | 64    | 43   | 102  | 105  | 0     | 0     | 0     | 0     | 0    | 111  | 0    | 0    | 0    | 0    | 0    | 0    | .           | PTS sugar transporter subunit IIB                         |
| NW338_01430 | 66    | 85   | 40   | 41   | 19    | 24    | 5     | 5     | 0    | 8    | 0    | 0    | 0    | 67   | 110  | 11   | .           | PTS sugar transporter subunit IIA                         |
| NW338_01435 | 0     | 159  | 61   | 82   | 91    | 118   | 267   | 73    | 0    | 270  | 105  | 366  | 0    | 219  | 219  | 0    | <i>mepR</i> | BglG family transcription antiterminator                  |
| NW338_01440 | 0     | 33   | 14   | 17   | 78    | 39    | 8     | 0     | 43   | 0    | 0    | 18   | 26   | 0    | 0    | 0    | <i>mepA</i> | multidrug efflux transporter transcriptional repressor    |
| NW338_01445 | 0     | 36   | 59   | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 111  | 180  | 30   | 0    | 0    | .           | MepR                                                      |
| NW338_01450 | 21    | 91   | 64   | 92   | 103   | 164   | 38    | 71    | 88   | 71   | 172  | 114  | 313  | 284  | 262  | 298  | <i>glpT</i> | MepB family protein                                       |
| NW338_01455 | 0     | 0    | 0    | 0    | 68    | 79    | 89    | 157   | 0    | 17   | 116  | 0    | 0    | 0    | 0    | 92   | .           | glycerol-3-phosphate transporter                          |
| NW338_01460 | 41    | 24   | 0    | 0    | 47    | 82    | 295   | 154   | 0    | 0    | 42   | 93   | 0    | 48   | 0    | 12   | .           | VOC family protein                                        |
| NW338_01465 | 0     | 0    | 0    | 45   | 67    | 70    | 276   | 189   | 0    | 0    | 186  | 420  | 342  | 212  | 307  | 210  | .           | LLM class flavin-dependent oxidoreductase                 |
| NW338_01470 | 90    | 19   | 0    | 14   | 25    | 118   | 21    | 24    | 120  | 0    | 150  | 262  | 36   | 0    | 0    | 81   | .           | NAD(P)H-dependent oxidoreductase                          |
| NW338_01480 | 85    | 35   | 47   | 140  | 0     | 88    | 157   | 75    | 0    | 0    | 0    | 0    | 65   | 25   | 318  | 65   | .           | YeiH family protein                                       |
| NW338_01485 | 0     | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 64   | .           | GNAT family N-acetyltransferase                           |
| NW338_01490 | 38    | 0    | 16   | 0    | 0     | 0     | 0     | 31    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 14   | <i>efeB</i> | hypothetical protein                                      |
| NW338_01495 | 27    | 11   | 0    | 0    | 0     | 7     | 6     | 12    | 0    | 0    | 0    | 44   | 0    | 8    | 0    | 36   | .           | iron uptake transporter deferrochelate/oxidoreductase     |
| NW338_01500 | 0     | 14   | 88   | 0    | 0     | 30    | 0     | 27    | 75   | 0    | 0    | 35   | 0    | 23   | 0    | 0    | <i>tatC</i> | subunit                                                   |
| NW338_01505 | 0     | 0    | 86   | 0    | 0     | 137   | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 63   | 0    | 0    | .           | FTR1 family iron permease                                 |
| NW338_01510 | 0     | 0    | 116  | 30   | 0     | 54    | 0     | 51    | 0    | 127  | 0    | 0    | 86   | 33   | 0    | 206  | .           | twin-arginine translocase subunit TatC                    |
| NW338_01515 | 0     | 0    | 0    | 68   | 0     | 164   | 346   | 104   | 515  | 242  | 622  | 247  | 0    | 0    | 0    | 0    | .           | twin-arginine translocase TatA/TatE family subunit        |
| NW338_01520 | 105   | 63   | 0    | 46   | 54    | 99    | 29    | 95    | 0    | 0    | 62   | 0    | 0    | 0    | 0    | 18   | .           | DUF1398 family protein                                    |
| NW338_01525 | 0     | 79   | 58   | 61   | 0     | 15    | 37    | 84    | 0    | 0    | 10   |      |      |      |      |      |             |                                                           |

|             |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |                                                                                                                                  |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|----------------------------------------------------------------------------------------------------------------------------------|
| NW338_01555 | 0    | 31   | 14   | 18   | 55   | 20   | 38   | 29   | 0    | 0    | 0    | 0    | 0     | 0    | 0    | 10   | bifunctional homocysteine S-methyltransferase/methylenetetrahydrofolate reductase                                                |
| NW338_01560 | 64   | 22   | 25   | 48   | 43   | 0    | 0    | 27   | 0    | 78   | 0    | 0    | 0     | 0    | 0    | 0    | PLP-dependent aspartate aminotransferase family protein<br>aminotransferase class I/II-fold pyridoxal phosphate-dependent enzyme |
| NW338_01565 | 26   | 0    | 41   | 30   | 0    | 17   | 9    | 21   | 0    | 0    | 40   | 0    | 32    | 0    | 0    | 0    | ParB/RepB/SpoIJ family partition protein                                                                                         |
| NW338_01570 | 0    | 11   | 0    | 41   | 90   | 57   | 83   | 39   | 0    | 0    | 0    | 0    | 0     | 170  | 0    | 36   | mechanosensitive ion channel family protein                                                                                      |
| NW338_01575 | 32   | 47   | 63   | 137  | 0    | 76   | 132  | 83   | 0    | 0    | 0    | 0    | 94    | 31   | 0    | 14   | DUF951 domain-containing protein                                                                                                 |
| NW338_01580 | 212  | 125  | 222  | 68   | 0    | 103  | 0    | 0    | 289  | 0    | 0    | 0    | 0     | 67   | 0    | 331  | redox-regulated ATPase YchF                                                                                                      |
| NW338_01585 | 244  | 302  | 41   | 251  | 161  | 80   | 38   | 133  | 383  | 170  | 177  | 208  | 848   | 754  | 872  | 353  | hypothetical protein                                                                                                             |
| NW338_01590 | 390  | 149  | 235  | 0    | 0    | 386  | 215  | 680  | 1467 | 1399 | 1433 | 1629 | 764   | 747  | 0    | 278  | 30S ribosomal protein S6                                                                                                         |
| NW338_01595 | 998  | 1481 | 1721 | 2264 | 1317 | 3550 | 4894 | 3427 | 1115 | 2015 | 512  | 1617 | 11731 | 9387 | 8203 | 6551 | single-stranded DNA-binding protein                                                                                              |
| NW338_01600 | 1092 | 1365 | 2173 | 1673 | 1828 | 2767 | 1936 | 2804 | 429  | 342  | 719  | 773  | 1789  | 1796 | 2312 | 1656 | 30S ribosomal protein S18                                                                                                        |
| NW338_01605 | 1428 | 2791 | 2989 | 3349 | 1629 | 1163 | 1959 | 1741 | 6296 | 6648 | 3506 | 4295 | 3348  | 2870 | 1832 | 1681 | YxeA family protein                                                                                                              |
| NW338_01625 | 0    | 0    | 0    | 0    | 0    | 0    | 28   | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0    | 0    | PepSY domain-containing protein                                                                                                  |
| NW338_01630 | 368  | 94   | 79   | 134  | 244  | 188  | 177  | 154  | 92   | 56   | 299  | 42   | 186   | 24   | 599  | 106  | helix-turn-helix domain-containing protein                                                                                       |
| NW338_01635 | 0    | 241  | 98   | 440  | 684  | 913  | 1211 | 376  | 651  | 1179 | 2815 | 3638 | 421   | 246  | 348  | 482  |                                                                                                                                  |
| NW338_01640 | 4767 | 5298 | 1186 | 2452 | 7187 | 2360 | 1406 | 1425 | 4472 | 3892 | 2957 | 3074 | 1503  | 977  | 361  | 554  | GlsB/YeaQ/YmgE family stress response membrane protein                                                                           |
| NW338_01650 | 0    | 49   | 66   | 52   | 0    | 46   | 53   | 67   | 0    | 85   | 362  | 210  | 162   | 23   | 0    | 96   | phosphoglycerate mutase family protein                                                                                           |
| NW338_01655 | 121  | 41   | 50   | 66   | 0    | 122  | 0    | 31   | 763  | 1117 | 109  | 751  | 287   | 0    | 238  | 33   | hypothetical protein                                                                                                             |
| NW338_01665 | 348  | 168  | 130  | 137  | 80   | 149  | 16   | 180  | 0    | 196  | 168  | 78   | 57    | 251  | 440  | 187  | NDxxF motif lipoprotein                                                                                                          |
| NW338_01675 | 1101 | 1281 | 1454 | 1434 | 1887 | 1489 | 2690 | 3082 | 1076 | 1162 | 1454 | 1889 | 1809  | 2542 | 2484 | 1639 | alkyl hydroperoxide reductase subunit F                                                                                          |
| NW338_01685 | 133  | 169  | 447  | 380  | 99   | 101  | 369  | 179  | 278  | 0    | 59   | 228  | 366   | 122  | 0    | 119  | oxygen-insensitive NADPH nitroreductase                                                                                          |
| NW338_01690 | 137  | 183  | 224  | 305  | 470  | 406  | 249  | 275  | 0    | 35   | 46   | 76   | 94    | 181  | 434  | 121  | L-cystine transporter                                                                                                            |
| NW338_01700 | 1537 | 1284 | 1151 | 743  | 1728 | 926  | 624  | 707  | 965  | 993  | 1293 | 1218 | 450   | 350  | 647  | 309  | hypothetical protein                                                                                                             |
| NW338_01705 | 216  | 231  | 195  | 469  | 151  | 196  | 169  | 201  | 158  | 137  | 334  | 237  | 178   | 242  | 401  | 167  | hypothetical protein                                                                                                             |
| NW338_01710 | 2336 | 1296 | 264  | 820  | 1739 | 871  | 362  | 506  | 1811 | 2708 | 2531 | 2816 | 1104  | 1071 | 1077 | 2423 | general stress protein                                                                                                           |
| NW338_01715 | 548  | 225  | 416  | 120  | 1293 | 1562 | 612  | 444  | 514  | 0    | 153  | 42   | 1122  | 741  | 451  | 789  | xanthine phosphoribosyltransferase                                                                                               |
| NW338_01720 | 161  | 284  | 166  | 175  | 692  | 897  | 438  | 513  | 94   | 13   | 50   | 167  | 494   | 663  | 1104 | 397  | purine permease                                                                                                                  |
| NW338_01725 | 1049 | 1233 | 1318 | 1025 | 2355 | 2386 | 1769 | 1743 | 280  | 145  | 191  | 243  | 623   | 291  | 778  | 395  | IMP dehydrogenase                                                                                                                |
| NW338_01730 | 2065 | 2309 | 1597 | 1834 | 3348 | 3489 | 2530 | 2723 | 257  | 261  | 124  | 245  | 1825  | 2446 | 1990 | 2210 | glutamine-hydrolyzing GMP synthase                                                                                               |
| NW338_01760 | 161  | 327  | 300  | 214  | 304  | 216  | 328  | 195  | 62   | 166  | 300  | 0    | 246   | 117  | 410  | 184  | SDR family oxidoreductase                                                                                                        |
| NW338_01765 | 0    | 0    | 38   | 0    | 0    | 58   | 15   | 104  | 89   | 24   | 0    | 0    | 0     | 0    | 0    | 0    | superantigen-like protein SSL1                                                                                                   |
| NW338_01770 | 0    | 0    | 0    | 0    | 0    | 9    | 0    | 0    | 0    | 63   | 0    | 0    | 19    | 0    | 25   | 0    | superantigen-like protein SSL2                                                                                                   |
| NW338_01775 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 12   | 0    | superantigen-like protein SSL3                                                                                                   |
| NW338_01785 | 0    | 26   | 0    | 12   | 0    | 0    | 0    | 0    | 114  | 135  | 61   | 0    | 0     | 0    | 0    | 0    | superantigen-like protein SSL4                                                                                                   |
| NW338_01790 | 0    | 0    | 0    | 0    | 54   | 9    | 0    | 0    | 0    | 45   | 0    | 72   | 0     | 0    | 0    | 25   | superantigen-like protein SSL5                                                                                                   |
| NW338_01800 | 0    | 23   | 0    | 0    | 0    | 9    | 15   | 0    | 174  | 0    | 0    | 0    | 0     | 74   | 0    | 25   | superantigen-like protein SSL7                                                                                                   |
| NW338_01810 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 159  | 0     | 0    | 0    | 0    | superantigen-like protein SSL9                                                                                                   |
| NW338_01835 | 0    | 0    | 0    | 0    | 0    | 29   | 101  | 14   | 0    | 0    | 272  | 0    | 0     | 0    | 0    | 25   | superantigen-like protein SSL11                                                                                                  |
| NW338_01840 | 0    | 30   | 0    | 33   | 42   | 22   | 28   | 35   | 0    | 238  | 100  | 108  | 0     | 0    | 0    | 0    | FKLRK protein                                                                                                                    |
| NW338_01845 | 150  | 195  | 242  | 257  | 162  | 298  | 869  | 1265 | 5975 | 5446 | 5173 | 5621 | 627   | 1283 | 0    | 749  | myeloperoxidase inhibitor SPIN                                                                                                   |
| NW338_01865 | 0    | 19   | 34   | 10   | 51   | 16   | 23   | 7    | 91   | 0    | 64   | 0    | 0     | 0    | 0    | 0    | hypothetical protein                                                                                                             |
| NW338_01870 | 0    | 30   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0    | 0    | hypothetical protein                                                                                                             |
| NW338_01875 | 0    | 0    | 0    | 0    | 0    | 67   | 0    | 0    | 187  | 0    | 0    | 77   | 0     | 0    | 0    | 0    | hypothetical protein                                                                                                             |
| NW338_01880 | 109  | 0    | 0    | 53   | 0    | 104  | 0    | 0    | 0    | 0    | 0    | 93   | 0     | 263  | 0    | 196  | hypothetical protein                                                                                                             |
| NW338_01885 | 36   | 29   | 24   | 35   | 56   | 10   | 50   | 10   | 0    | 0    | 0    | 47   | 0     | 0    | 144  | 0    | GTP-binding protein                                                                                                              |
| NW338_01915 | 157  | 75   | 26   | 49   | 158  | 114  | 86   | 61   | 146  | 22   | 28   | 38   | 32    | 9    | 0    | 57   | NADH dehydrogenase subunit 5                                                                                                     |
| NW338_01920 | 33   | 54   | 48   | 92   | 96   | 81   | 199  | 137  | 19   | 0    | 15   | 66   | 105   | 164  | 166  | 109  | YbcC family protein                                                                                                              |
| NW338_01925 | 236  | 395  | 430  | 160  | 381  | 354  | 171  | 247  | 1127 | 449  | 709  | 480  | 683   | 1271 | 253  | 648  | DUF2294 domain-containing protein                                                                                                |
| NW338_01930 | 111  | 0    | 0    | 0    | 60   | 49   | 25   | 76   | 0    | 115  | 0    | 0    | 85    | 65   | 406  | 189  | hypothetical protein                                                                                                             |
| NW338_01935 | 133  | 193  | 519  | 152  | 0    | 0    | 0    | 14   | 180  | 168  | 66   | 219  | 0     | 288  | 508  | 318  | phosphatase PAP2 family protein                                                                                                  |
| NW338_01940 | 116  | 125  | 225  | 76   | 287  | 154  | 227  | 229  | 0    | 0    | 86   | 0    | 328   | 111  | 480  | 199  | carboxylesterase                                                                                                                 |
| NW338_01950 | 0    | 7    | 281  | 138  | 0    | 25   | 31   | 161  | 39   | 0    | 0    | 18   | 0     | 48   | 0    | 19   | sodium-dependent transporter                                                                                                     |
| NW338_01955 | 0    | 11   | 0    | 69   | 42   | 20   | 129  | 203  | 67   | 0    | 0    | 0    | 0     | 0    | 0    | 33   | cysteine synthase family protein                                                                                                 |
| NW338_01960 | 25   | 17   | 40   | 100  | 55   | 145  | 117  | 178  | 0    | 0    | 39   | 93   | 0     | 24   | 0    | 49   | bifunctional cystathionine gamma-lyase/homocysteine desulfhydrase                                                                |
| NW338_01965 | 0    | 0    | 120  | 246  | 90   | 91   | 671  | 890  | 0    | 0    | 86   | 0    | 0     | 140  | 165  | 100  | methionine ABC transporter ATP-binding protein<br>dipeptide ABC transporter glycylmethionine-binding                             |
| NW338_01975 | 0    | 23   | 54   | 179  | 119  | 173  | 596  | 525  | 0    | 0    | 0    | 0    | 158   | 109  | 36   | gmpC | lipoprotein                                                                                                                      |
| NW338_01980 | 324  | 193  | 539  | 524  | 911  | 621  | 678  | 958  | 282  | 170  | 425  | 362  | 223   | 78   | 341  | 426  | autolysin/adhesin Aaa                                                                                                            |
| NW338_01985 | 0    | 35   | 181  | 121  | 0    | 407  | 38   | 109  | 0    | 633  | 155  | 181  | 306   | 797  | 2272 | 1385 | hypothetical protein                                                                                                             |
| NW338_01990 | 298  | 0    | 49   | 58   | 0    | 67   | 0    | 50   | 0    | 0    | 160  | 0    | 0     | 269  | 0    | 32   | NUDIX domain-containing protein                                                                                                  |
| NW338_01995 | 280  | 118  | 0    | 67   | 154  | 13   | 21   | 0    | 0    | 0    | 172  | 154  | 170   | 28   | 378  | 63   | GNAT family N-acetyltransferase                                                                                                  |
| NW338_02000 | 191  | 81   | 161  | 32   | 32   | 52   | 110  | 52   | 144  | 365  | 272  | 467  | 241   | 62   | 140  | 93   | YibE/F family protein                                                                                                            |
| NW338_02005 | 51   | 43   | 115  | 69   | 185  | 94   | 186  | 29   | 146  | 0    | 39   | 22   | 232   | 12   | 0    | 96   | YibE/F family protein                                                                                                            |
| NW338_02010 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 47   | 0    | 0    | 0     | 0    | 0    | 22   | LysR family transcriptional regulator                                                                                            |
| NW338_02020 | 90   | 96   | 468  | 600  | 237  | 155  | 881  | 1107 | 40   | 0    | 30   | 0    | 76    | 0    | 116  | 81   | glutamate synthase subunit beta                                                                                                  |
| NW338_02030 | 3780 | 3442 | 3118 | 2051 | 1833 | 1476 | 868  | 353  | 238  | 206  | 90   | 180  | 863   | 806  | 737  | 914  | PTS system trehalose-specific EIIBC component                                                                                    |
| NW338_02035 | 1170 | 1839 | 1363 | 951  | 602  | 443  | 513  | 381  | 106  | 10   | 27   | 64   | 320   | 247  | 168  | 218  | alpha;alpha-phosphotrehalase                                                                                                     |
| NW338_02040 | 1196 | 1317 | 1401 | 964  | 859  | 446  | 509  | 675  | 242  | 44   | 57   | 77   | 418   | 145  | 0    | 66   | treR                                                                                                                             |
| NW338_02055 | 88   | 103  | 93   | 187  | 73   | 23   | 20   | 38   | 115  | 0    | 121  | 0    | 0     | 124  | 0    | 0    | N-acetyltransferase                                                                                                              |
| NW338_02060 | 196  | 298  | 580  | 516  | 582  | 298  | 410  | 397  | 272  | 9    | 52   | 72   | 607   | 542  | 832  | 361  | DNA polymerase III subunit gamma/tau                                                                                             |
| NW338_02065 | 1078 | 1241 | 1767 | 1162 | 1264 | 929  | 3265 | 2550 | 521  | 802  | 395  | 159  | 260   | 1346 | 1093 | 792  | YbaB/Ebfc family nucleoid-associated protein                                                                                     |
| NW338_02070 | 719  | 1073 | 450  | 1530 | 1453 | 1107 | 1802 | 1853 | 505  | 584  | 1179 | 851  | 2069  | 1263 | 1733 | 1642 | recombination mediator RecR                                                                                                      |
| NW338_02095 | 32   | 57   | 0    | 49   | 79   | 24   | 39   | 88   | 44   | 0    | 0    | 18   | 0     | 20   | 0    | 23   | aminotransferase class V-fold PLP-dependent enzyme                                                                               |
| NW338_02100 | 0    | 15   | 184  | 86   | 62   | 83   | 84   | 83   | 0    | 106  | 0    | 0    | 0     | 22   | 0    | 21   | dTMP kinase                                                                                                                      |
| NW338_02105 | 891  | 638  | 906  | 712  | 1023 | 1497 | 1153 | 1245 | 1023 | 446  | 529  | 1137 | 2781  | 2454 | 279  | 2945 | cyclic-di-AMP receptor                                                                                                           |
| NW338_02110 | 47   | 62   | 136  | 35   | 27   | 104  | 0    | 20   | 63   | 132  | 90   | 122  | 101   | 329  | 0    | 111  | DNA polymerase III subunit delta'                                                                                                |
| NW338_02115 | 0    | 52   | 32   | 60   | 0    | 65   | 132  | 73   | 0    | 0    | 52   | 30   | 182   | 149  | 114  | 38   | stage 0 sporulation family protein                                                                                               |
| NW338_02120 | 133  | 319  | 140  | 348  | 0    | 172  | 30   | 34   | 471  | 46   | 120  | 215  | 0     | 78   | 499  | 384  | DNA replication initiation control protein YabA                                                                                  |
| NW338_02125 | 59   | 66   | 89   | 35   | 34   | 0    | 132  | 72   | 0    | 0    | 183  | 0    | 0     | 19   | 0    | 100  | tRNA1(Vai) (adenine(37)-N6)-methyltransferase                                                                                    |
| NW338_02130 | 173  | 64   | 78   | 56   | 0    | 25   | 41   | 114  | 0    | 64   | 0    | 226  | 0     | 0    | 0    | 51   | GIY-YIG nuclease family protein                                                                                                  |
| NW338_02135 | 144  | 61   | 77   | 97   | 155  | 15   | 61   | 90   | 216  | 0    | 0    | 120  | 112   | 155  | 207  | 170  | 16S rRNA (cytidine(1402)-2'-O)-methyltransferase                                                                                 |
| NW338_02140 | 89   | 253  | 210  | 255  | 339  | 402  | 482  | 322  | 31   | 120  | 53   | 12   | 352   | 128  | 267  | 182  | methionine--tRNA ligase                                                                                                          |
| NW338_02145 | 207  | 498  | 502  | 418  | 913  | 828  | 1010 | 861  | 585  | 369  | 575  | 528  | 773   | 848  | 1111 | 1015 | TatD family hydrolase                                                                                                            |
| NW338_02150 | 167  | 231  | 36   | 47   | 268  | 267  | 451  | 151  | 0    | 0    |      |      |       |      |      |      |                                                                                                                                  |

|             |      |       |       |      |       |       |       |       |      |      |      |      |      |       |      |      |              |                                                                                                       |
|-------------|------|-------|-------|------|-------|-------|-------|-------|------|------|------|------|------|-------|------|------|--------------|-------------------------------------------------------------------------------------------------------|
| NW338_02190 | 375  | 456   | 463   | 552  | 469   | 498   | 658   | 670   | 169  | 60   | 33   | 148  | 583  | 533   | 332  | 339  | <i>glmU</i>  | bifunctional UDP-N-acetylglucosamine diphosphorylase/glucosamine-1-phosphate N-acetyltransferase GlmU |
| NW338_02195 | 319  | 346   | 372   | 378  | 243   | 470   | 891   | 677   | 63   | 118  | 0    | 346  | 743  | 191   | 546  | 553  | .            | ribose-phosphate diphosphokinase                                                                      |
| NW338_02200 | 2936 | 4082  | 3239  | 5017 | 8603  | 11348 | 12496 | 13331 | 2115 | 3227 | 2132 | 2574 | 2950 | 2011  | 2573 | 2737 | .            | 50S ribosomal protein L25/general stress protein Ctc                                                  |
| NW338_02205 | 99   | 233   | 101   | 315  | 154   | 468   | 546   | 288   | 212  | 28   | 0    | 216  | 249  | 233   | 0    | 182  | <i>pth</i>   | aminoacyl-tRNA hydrolase                                                                              |
| NW338_02210 | 58   | 111   | 161   | 203  | 247   | 162   | 203   | 326   | 15   | 26   | 31   | 46   | 277  | 171   | 101  | 144  | <i>mfd</i>   | transcription-repair coupling factor                                                                  |
| NW338_02215 | 94   | 119   | 227   | 212  | 167   | 148   | 160   | 193   | 0    | 0    | 56   | 16   | 277  | 235   | 181  | 151  | .            | polysaccharide biosynthesis protein                                                                   |
| NW338_02220 | 197  | 192   | 299   | 318  | 412   | 195   | 311   | 323   | 51   | 13   | 70   | 0    | 69   | 252   | 77   | 143  | .            | SAM-dependent methyltransferase                                                                       |
| NW338_02225 | 0    | 301   | 552   | 459  | 290   | 227   | 235   | 573   | 0    | 61   | 0    | 0    | 0    | 0     | 0    | 96   | .            | RNA-binding S4 domain-containing protein                                                              |
| NW338_02230 | 145  | 259   | 148   | 265  | 161   | 424   | 105   | 249   | 134  | 126  | 0    | 0    | 0    | 104   | 0    | 65   | .            | septum formation initiator family protein                                                             |
| NW338_02235 | 695  | 696   | 948   | 957  | 1705  | 578   | 484   | 998   | 693  | 774  | 372  | 261  | 571  | 332   | 661  | 244  | .            | S1 domain-containing RNA-binding protein                                                              |
| NW338_02240 | 91   | 44    | 75    | 61   | 0     | 67    | 16    | 58    | 0    | 0    | 49   | 100  | 113  | 21    | 0    | 61   | <i>tilS</i>  | tRNA lysidine(34) synthetase TilS                                                                     |
| NW338_02245 | 80   | 106   | 0     | 146  | 71    | 61    | 96    | 212   | 0    | 0    | 0    | 209  | 380  | 222   | 0    | 0    | <i>hpt</i>   | hypoxanthine phosphoribosyltransferase                                                                |
| NW338_02250 | 680  | 493   | 1378  | 1331 | 1448  | 761   | 1725  | 1571  | 245  | 297  | 419  | 451  | 652  | 494   | 598  | 696  | <i>ftsH</i>  | ATP-dependent zinc metalloprotease FtsH                                                               |
| NW338_02255 | 162  | 346   | 1027  | 825  | 642   | 699   | 1474  | 1578  | 193  | 92   | 220  | 689  | 699  | 1123  | 389  | 617  | <i>hslO</i>  | Hsp33 family molecular chaperone HslO                                                                 |
| NW338_02260 | 1266 | 1300  | 2001  | 2011 | 1294  | 1368  | 3406  | 3140  | 520  | 455  | 477  | 458  | 710  | 984   | 861  | 416  | <i>cysK</i>  | cysteine synthase A                                                                                   |
| NW338_02265 | 0    | 24    | 69    | 78   | 253   | 171   | 435   | 228   | 65   | 0    | 110  | 0    | 44   | 17    | 0    | 184  | <i>folP</i>  | dihydropteroate synthase                                                                              |
| NW338_02270 | 0    | 78    | 0     | 83   | 68    | 108   | 0     | 32    | 0    | 0    | 114  | 0    | 97   | 74    | 0    | 35   | <i>folB</i>  | dihydroneopterin aldolase                                                                             |
| NW338_02275 | 150  | 40    | 271   | 146  | 354   | 220   | 43    | 291   | 110  | 0    | 93   | 51   | 615  | 473   | 0    | 195  | <i>folK</i>  | 2-amino-4-hydroxy-6- hydroxymethyldihydropteridine diphosphokinase                                    |
| NW338_02285 | 237  | 441   | 332   | 531  | 565   | 565   | 520   | 785   | 117  | 83   | 204  | 506  | 670  | 291   | 585  | 398  | <i>lysS</i>  | lysine--tRNA ligase                                                                                   |
| NW338_02375 | 182  | 280   | 216   | 186  | 352   | 220   | 415   | 293   | 0    | 241  | 144  | 388  | 465  | 489   | 904  | 451  | <i>pdxS</i>  | pyridoxal 5'-phosphate synthase lyase subunit PdxS                                                    |
| NW338_02380 | 51   | 204   | 266   | 137  | 68    | 143   | 0     | 97    | 840  | 348  | 454  | 321  | 612  | 261   | 302  | 526  | <i>pdxT</i>  | pyridoxal 5'-phosphate synthase glutaminase subunit PdxT                                              |
| NW338_02390 | 548  | 503   | 2850  | 2927 | 1621  | 1381  | 4463  | 7896  | 376  | 104  | 883  | 1010 | 1685 | 1402  | 2042 | 1904 | .            | CtsR family transcriptional regulator                                                                 |
| NW338_02395 | 385  | 623   | 2625  | 3501 | 640   | 316   | 1897  | 2982  | 318  | 0    | 798  | 528  | 656  | 590   | 1534 | 1364 | .            | UvrB/UvrC motif-containing protein                                                                    |
| NW338_02400 | 575  | 269   | 1792  | 2291 | 668   | 512   | 1852  | 3456  | 112  | 154  | 631  | 473  | 577  | 500   | 1123 | 838  | .            | protein arginine kinase                                                                               |
| NW338_02405 | 730  | 790   | 3311  | 3443 | 1372  | 1082  | 3698  | 5194  | 277  | 203  | 993  | 1049 | 864  | 622   | 793  | 1444 | .            | ATP-dependent Clp protease ATP-binding subunit                                                        |
| NW338_02410 | 196  | 124   | 419   | 253  | 179   | 345   | 455   | 617   | 212  | 103  | 108  | 353  | 199  | 138   | 319  | 293  | <i>radA</i>  | DNA repair protein RadA                                                                               |
| NW338_02415 | 107  | 71    | 274   | 270  | 82    | 140   | 308   | 400   | 55   | 30   | 261  | 150  | 137  | 169   | 162  | 308  | .            | PIN/TRAM domain-containing protein                                                                    |
| NW338_02420 | 189  | 214   | 419   | 413  | 679   | 251   | 633   | 678   | 82   | 0    | 59   | 137  | 304  | 508   | 774  | 307  | <i>gltX</i>  | glutamate--tRNA ligase                                                                                |
| NW338_02430 | 169  | 327   | 381   | 391  | 103   | 104   | 268   | 338   | 123  | 175  | 152  | 169  | 143  | 83    | 66   | 144  | <i>cysS</i>  | cysteine--tRNA ligase                                                                                 |
| NW338_02435 | 370  | 220   | 385   | 454  | 228   | 0     | 463   | 245   | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 44   | .            | Mini-ribonuclease 3                                                                                   |
| NW338_02440 | 288  | 303   | 366   | 382  | 305   | 217   | 685   | 954   | 0    | 21   | 0    | 0    | 212  | 0     | 0    | 75   | <i>rlmB</i>  | 23S rRNA (guanosine(2251)-2'-O)-methyltransferase RlmB                                                |
| NW338_02445 | 54   | 103   | 185   | 119  | 143   | 126   | 308   | 411   | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 174  | .            | NYN domain-containing protein                                                                         |
| NW338_02450 | 131  | 62    | 102   | 184  | 185   | 85    | 187   | 139   | 0    | 0    | 0    | 86   | 0    | 138   | 0    | 96   | .            | RNA polymerase sigma factor                                                                           |
| NW338_02460 | 392  | 714   | 514   | 848  | 0     | 179   | 330   | 477   | 0    | 88   | 229  | 308  | 0    | 74    | 0    | 139  | <i>secE</i>  | preprotein translocase subunit SecE                                                                   |
| NW338_02465 | 847  | 760   | 590   | 592  | 850   | 736   | 1319  | 1178  | 96   | 285  | 196  | 136  | 332  | 168   | 0    | 225  | <i>nusG</i>  | transcription termination/antitermination protein NusG                                                |
| NW338_02470 | 2074 | 1681  | 2192  | 1949 | 1834  | 2228  | 2322  | 3216  | 670  | 850  | 204  | 1280 | 2607 | 3265  | 2696 | 1931 | <i>rpIK</i>  | 50S ribosomal protein L11                                                                             |
| NW338_02475 | 1091 | 1217  | 1492  | 1826 | 2303  | 3460  | 6680  | 5270  | 736  | 815  | 732  | 807  | 1984 | 2177  | 1995 | 1895 | <i>rpIA</i>  | 50S ribosomal protein L1                                                                              |
| NW338_02480 | 1858 | 1723  | 2083  | 2394 | 2295  | 4177  | 4487  | 4786  | 674  | 979  | 1230 | 2073 | 5586 | 4187  | 4053 | 4982 | <i>rpIJ</i>  | 50S ribosomal protein L10                                                                             |
| NW338_02485 | 1863 | 2891  | 1865  | 3374 | 2686  | 4124  | 7348  | 5925  | 444  | 482  | 1515 | 848  | 3560 | 3363  | 2148 | 3264 | <i>rpIL</i>  | 50S ribosomal protein L7/L12                                                                          |
| NW338_02490 | 47   | 178   | 48    | 286  | 0     | 354   | 0     | 252   | 97   | 0    | 104  | 133  | 58   | 22    | 571  | 295  | .            | class I SAM-dependent methyltransferase                                                               |
| NW338_02495 | 1143 | 1040  | 1700  | 2047 | 1771  | 1317  | 3112  | 3377  | 477  | 452  | 511  | 759  | 901  | 1074  | 1552 | 1186 | <i>rpoB</i>  | DNA-directed RNA polymerase subunit beta                                                              |
| NW338_02500 | 1341 | 1415  | 1957  | 2161 | 1767  | 1512  | 2471  | 2802  | 627  | 452  | 605  | 578  | 1458 | 1284  | 1597 | 1619 | <i>rpoC</i>  | DNA-directed RNA polymerase subunit beta'                                                             |
| NW338_02505 | 1588 | 2122  | 980   | 2814 | 3041  | 5398  | 3244  | 3516  | 674  | 1252 | 840  | 514  | 5380 | 6101  | 3269 | 5139 | .            | ribosomal L7Ae/L30e/S12e/Gadd45 family protein                                                        |
| NW338_02510 | 1900 | 2769  | 1281  | 3099 | 2870  | 6678  | 3617  | 4359  | 1801 | 1523 | 1593 | 1495 | 8050 | 5315  | 6598 | 5094 | <i>rpsL</i>  | 30S ribosomal protein S12                                                                             |
| NW338_02515 | 2675 | 3058  | 3284  | 3263 | 3140  | 5420  | 6103  | 5393  | 703  | 366  | 803  | 1520 | 1392 | 1856  | 1488 | 1966 | <i>rpsG</i>  | 30S ribosomal protein S7                                                                              |
| NW338_02520 | 3121 | 5167  | 3950  | 4523 | 5237  | 8150  | 7714  | 7431  | 1337 | 1958 | 972  | 2027 | 5408 | 5383  | 5319 | 3880 | <i>fusA</i>  | elongation factor G                                                                                   |
| NW338_02525 | 7633 | 11261 | 10028 | 9570 | 11600 | 14301 | 14895 | 15101 | 2769 | 1336 | 2909 | 4424 | 9021 | 10333 | 6206 | 6870 | <i>tuf</i>   | elongation factor Tu                                                                                  |
| NW338_02535 | 485  | 667   | 435   | 385  | 514   | 595   | 359   | 307   | 241  | 123  | 236  | 506  | 471  | 411   | 667  | 593  | .            | glycine C-acetyltransferase                                                                           |
| NW338_02540 | 341  | 706   | 866   | 607  | 548   | 611   | 634   | 657   | 326  | 251  | 98   | 298  | 0    | 225   | 105  | 304  | <i>hchA</i>  | protein deglycase HchA                                                                                |
| NW338_02545 | 26   | 52    | 12    | 35   | 30    | 45    | 19    | 24    | 0    | 10   | 27   | 0    | 0    | 41    | 0    | 0    | .            | ribulokinase                                                                                          |
| NW338_02550 | 998  | 1048  | 574   | 657  | 494   | 559   | 356   | 218   | 241  | 210  | 282  | 425  | 469  | 513   | 270  | 240  | .            | NAD-dependent epimerase/dehydratase family protein                                                    |
| NW338_02555 | 213  | 236   | 463   | 668  | 576   | 435   | 819   | 787   | 154  | 244  | 41   | 294  | 585  | 123   | 332  | 302  | .            | branched-chain amino acid aminotransferase                                                            |
| NW338_02560 | 189  | 42    | 57    | 155  | 320   | 78    | 211   | 507   | 0    | 23   | 0    | 36   | 0    | 20    | 0    | 45   | .            | HAD family hydrolase                                                                                  |
| NW338_02565 | 0    | 0     | 39    | 0    | 38    | 81    | 91    | 101   | 0    | 24   | 126  | 74   | 0    | 21    | 0    | 65   | .            | deoxynucleoside kinase                                                                                |
| NW338_02570 | 0    | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 59   | .            | deoxynucleoside kinase                                                                                |
| NW338_02575 | 0    | 20    | 55    | 152  | 277   | 202   | 22    | 82    | 0    | 105  | 0    | 0    | 100  | 284   | 195  | 102  | <i>tadA</i>  | tRNA adenosine(34) deaminase TadA                                                                     |
| NW338_02580 | 0    | 11    | 98    | 45   | 44    | 73    | 36    | 199   | 0    | 0    | 153  | 121  | 41   | 0     | 0    | 63   | .            | Cof-type HAD-IIB family hydrolase                                                                     |
| NW338_02585 | 50   | 50    | 46    | 66   | 44    | 106   | 36    | 253   | 0    | 57   | 78   | 86   | 292  | 48    | 0    | 85   | .            | NAD(P)H-dependent oxidoreductase                                                                      |
| NW338_02590 | 51   | 128   | 147   | 74   | 122   | 16    | 54    | 33    | 0    | 39   | 23   | 0    | 52   | 41    | 0    | 33   | <i>sdrC</i>  | MSCRAMM family adhesin SdrC                                                                           |
| NW338_02595 | 31   | 41    | 85    | 69   | 145   | 83    | 70    | 83    | 0    | 28   | 39   | 22   | 82   | 64    | 94   | 75   | <i>sdrD</i>  | MSCRAMM family adhesin SdrD                                                                           |
| NW338_02600 | 36   | 52    | 59    | 74   | 847   | 521   | 197   | 238   | 18   | 43   | 63   | 83   | 12   | 13    | 0    | 12   | .            | MSCRAMM family adhesin SdrE                                                                           |
| NW338_02610 | 257  | 194   | 139   | 133  | 42    | 117   | 71    | 83    | 121  | 76   | 196  | 126  | 248  | 244   | 0    | 235  | .            | glycosyltransferase                                                                                   |
| NW338_02620 | 220  | 340   | 579   | 539  | 329   | 436   | 910   | 1057  | 170  | 72   | 321  | 504  | 1112 | 458   | 0    | 918  | <i>bshB2</i> | bacillithiol biosynthesis deacetylase BshB2                                                           |
| NW338_02625 | 119  | 131   | 213   | 339  | 105   | 558   | 464   | 848   | 162  | 0    | 115  | 290  | 436  | 179   | 0    | 35   | .            | YojF family protein                                                                                   |
| NW338_02630 | 179  | 38    | 133   | 158  | 0     | 76    | 14    | 113   | 69   | 63   | 0    | 99   | 0    | 176   | 790  | 134  | <i>nagB</i>  | glucosamine-6-phosphate deaminase                                                                     |
| NW338_02635 | 288  | 91    | 77    | 81   | 673   | 556   | 513   | 647   | 274  | 0    | 136  | 275  | 232  | 589   | 290  | 193  | <i>hxlA</i>  | 3-hexulose-6-phosphate synthase                                                                       |
| NW338_02640 | 521  | 326   | 491   | 486  | 797   | 1180  | 1172  | 1459  | 383  | 881  | 238  | 1045 | 1116 | 685   | 811  | 911  | <i>hxlB</i>  | 6-phospho-3-hexuloisomerase                                                                           |
| NW338_02650 | 114  | 111   | 112   | 69   | 328   | 181   | 113   | 115   | 384  | 239  | 615  | 285  | 251  | 573   | 248  | 452  | .            | MFS transporter                                                                                       |
| NW338_02655 | 0    | 0     | 0     | 8    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 18   | 0    | 77    | 123  | 0    | .            | AMP-binding protein                                                                                   |
| NW338_02660 | 0    | 36    | 0     | 29   | 34    | 48    | 53    | 53    | 152  | 43   | 39   | 120  | 274  | 231   | 0    | 128  | .            | thiolase family protein                                                                               |
| NW338_02665 | 0    | 78    | 0     | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | 97   | 0     | 0    | 0    | .            | protein VraC                                                                                          |
| NW338_02670 | 0    | 0     | 143   | 0    | 0     | 0     | 0     | 0     | 218  | 1475 | 1245 | 1420 | 174  | 772   | 0    | 344  | .            | hypothetical protein                                                                                  |
| NW338_02675 | 1406 | 589   | 291   | 599  | 228   | 37    | 482   | 118   | 6321 | 3786 | 4693 | 5452 | 7065 | 3949  | 6273 | 3734 | <i>vraX</i>  | C1q-binding complement inhibitor VraX                                                                 |
| NW338_02680 | 370  | 494   | 484   | 626  | 670   | 448   | 494   | 529   | 1060 | 1256 | 641  | 903  | 377  | 563   | 706  | 326  | <i>thiD</i>  | bifunctional hydroxymethylpyrimidine kinase/phosph                                                    |

|             |      |      |      |      |      |      |      |     |       |       |       |       |      |      |      |              |                                                 |                                                           |
|-------------|------|------|------|------|------|------|------|-----|-------|-------|-------|-------|------|------|------|--------------|-------------------------------------------------|-----------------------------------------------------------|
| NW338_02835 | 76   | 285  | 155  | 139  | 139  | 240  | 102  | 63  | 0     | 263   | 47    | 26    | 0    | 14   | 283  | 91           | .                                               | aldo/keto reductase                                       |
| NW338_02840 | 460  | 142  | 477  | 411  | 45   | 0    | 0    | 0   | 430   | 562   | 793   | 534   | 1162 | 203  | 1144 | 779          | .                                               | flavodoxin family protein                                 |
| NW338_02845 | 91   | 60   | 164  | 172  | 80   | 142  | 148  | 40  | 0     | 0     | 0     | 153   | 0    | 0    | 0    | 138          | .                                               | GNAT family N-acetyltransferase                           |
| NW338_02850 | 185  | 116  | 285  | 252  | 413  | 313  | 328  | 474 | 0     | 50    | 34    | 81    | 113  | 93   | 202  | 104          | .                                               | HD domain-containing protein                              |
| NW338_02855 | 89   | 213  | 467  | 290  | 220  | 177  | 448  | 149 | 0     | 31    | 0     | 432   | 0    | 54   | 0    | 165          | .                                               | YwhD family protein                                       |
| NW338_02860 | 6548 | 5352 | 3275 | 3239 | 1667 | 1549 | 758  | 993 | 1176  | 1550  | 1424  | 1967  | 991  | 500  | 526  | 1058         | <i>adhP</i>                                     | alcohol dehydrogenase AdhP                                |
| NW338_02870 | 172  | 69   | 117  | 134  | 60   | 50   | 25   | 93  | 0     | 0     | 0     | 0     | 0    | 33   | 220  | 0            | .                                               | DUF1934 domain-containing protein                         |
| NW338_02875 | 140  | 151  | 133  | 96   | 289  | 264  | 180  | 146 | 317   | 112   | 166   | 192   | 272  | 57   | 105  | 80           | <i>argS</i>                                     | arginine--tRNA ligase                                     |
| NW338_02880 | 0    | 15   | 0    | 30   | 0    | 0    | 111  | 0   | 82    | 0     | 0     | 0     | 175  | 0    | 0    | 0            | .                                               | endonuclease III domain-containing protein                |
| NW338_02885 | 32   | 115  | 94   | 220  | 71   | 54   | 23   | 85  | 68    | 18    | 71    | 63    | 0    | 177  | 0    | 34           | .                                               | ABC transporter substrate-binding protein                 |
| NW338_02890 | 94   | 50   | 20   | 32   | 26   | 56   | 0    | 0   | 0     | 0     | 0     | 0     | 36   | 0    | 0    | 54           | .                                               | iron ABC transporter permease                             |
| NW338_02895 | 0    | 40   | 167  | 16   | 222  | 195  | 182  | 54  | 0     | 0     | 58    | 112   | 154  | 19   | 0    | 210          | .                                               | HAD family hydrolase                                      |
| NW338_02900 | 58   | 12   | 109  | 52   | 146  | 15   | 51   | 93  | 0     | 20    | 52    | 0     | 44   | 213  | 115  | 54           | .                                               | alpha/beta hydrolase                                      |
| NW338_02905 | 6191 | 5285 | 3663 | 2721 | 2279 | 1228 | 1713 | 684 | 4278  | 4912  | 4149  | 3231  | 3004 | 3154 | 1221 | 2233         | .                                               | hypothetical protein                                      |
| NW338_02910 | 140  | 80   | 41   | 145  | 88   | 55   | 14   | 40  | 167   | 181   | 449   | 632   | 221  | 539  | 242  | 564          | .                                               | hypothetical protein                                      |
| NW338_02915 | 36   | 65   | 24   | 91   | 63   | 107  | 26   | 37  | 1136  | 940   | 1196  | 920   | 1821 | 1897 | 986  | 1080         | .                                               | alpha/beta hydrolase                                      |
| NW338_02920 | 2992 | 1843 | 2745 | 2308 | 1557 | 980  | 693  | 758 | 36574 | 25074 | 42336 | 26106 | 2577 | 3090 | 8521 | 4219         | <i>sarA</i>                                     | global transcriptional regulator SarA                     |
| NW338_02925 | 31   | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0     | 0     | 45    | 61    | 0    | 15   | 0    | 46           | .                                               | DMT family transporter                                    |
| NW338_02930 | 0    | 0    | 0    | 0    | 0    | 27   | 0    | 0   | 233   | 71    | 0     | 0     | 0    | 0    | 0    | 243          | .                                               | DUF2922 domain-containing protein                         |
| NW338_02935 | 0    | 0    | 0    | 0    | 0    | 0    | 51   | 0   | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0            | .                                               | DUF1659 domain-containing protein                         |
| NW338_02940 | 0    | 45   | 0    | 0    | 0    | 0    | 0    | 17  | 0     | 29    | 0     | 261   | 168  | 24   | 0    | 0            | .                                               | tyrosine-type recombinase/integrase                       |
| NW338_02945 | 12   | 0    | 16   | 11   | 21   | 9    | 31   | 10  | 47    | 13    | 81    | 23    | 59   | 0    | 38   | 52           | <i>mnhA2</i>                                    | Na+/H+ antiporter Mnh2 subunit A                          |
| NW338_02950 | 67   | 0    | 69   | 0    | 0    | 0    | 0    | 28  | 276   | 38    | 202   | 598   | 110  | 64   | 216  | 42           | <i>mnhB2</i>                                    | Na+/H+ antiporter Mnh2 subunit B                          |
| NW338_02955 | 83   | 28   | 0    | 33   | 0    | 77   | 0    | 0   | 152   | 46    | 0     | 0     | 0    | 0    | 504  | 52           | <i>mnhC2</i>                                    | Na+/H+ antiporter Mnh2 subunit C                          |
| NW338_02960 | 29   | 23   | 37   | 45   | 70   | 8    | 0    | 79  | 146   | 11    | 85    | 104   | 48   | 45   | 0    | 41           | <i>mnhD2</i>                                    | Na+/H+ antiporter Mnh2 subunit D                          |
| NW338_02965 | 0    | 0    | 61   | 29   | 0    | 0    | 0    | 125 | 0     | 0     | 0     | 0     | 248  | 0    | 37   | <i>mnhE2</i> | Na+/H+ antiporter Mnh2 subunit E                |                                                           |
| NW338_02975 | 0    | 0    | 67   | 53   | 0    | 14   | 0    | 0   | 0     | 113   | 0     | 278   | 249  | 0    | 0    | 28           | <i>mnhG2</i>                                    | Na+/H+ antiporter Mnh2 subunit G                          |
| NW338_02980 | 126  | 259  | 460  | 688  | 210  | 287  | 570  | 768 | 257   | 136   | 242   | 282   | 297  | 197  | 135  | 668          | .                                               | sodium:proton antiporter                                  |
| NW338_02985 | 31   | 62   | 42   | 68   | 349  | 228  | 98   | 134 | 56    | 0     | 0     | 366   | 386  | 551  | 260  | .            | metal ABC transporter substrate-binding protein |                                                           |
| NW338_02990 | 0    | 19   | 0    | 14   | 332  | 187  | 25   | 68  | 72    | 168   | 0     | 0     | 472  | 568  | 110  | 465          | .                                               | metal ABC transporter permease                            |
| NW338_02995 | 0    | 13   | 26   | 19   | 261  | 409  | 115  | 114 | 0     | 0     | 60    | 101   | 952  | 478  | 604  | 696          | .                                               | metal ABC transporter ATP-binding protein                 |
| NW338_03000 | 139  | 829  | 362  | 261  | 339  | 579  | 32   | 184 | 982   | 303   | 560   | 471   | 311  | 270  | 0    | 189          | .                                               | metal-dependent transcriptional regulator                 |
| NW338_03005 | 99   | 0    | 0    | 15   | 51   | 61   | 14   | 42  | 465   | 923   | 570   | 269   | 694  | 386  | 0    | 375          | .                                               | M50 family metalloproteinase                              |
| NW338_03010 | 56   | 0    | 34   | 15   | 148  | 181  | 27   | 52  | 317   | 150   | 247   | 64    | 80   | 0    | 206  | 191          | .                                               | WecB/TagA/CpsF family glycosyltransferase                 |
| NW338_03015 | 162  | 160  | 184  | 321  | 345  | 466  | 280  | 609 | 66    | 733   | 612   | 616   | 258  | 267  | 0    | 283          | <i>tagH</i>                                     | teichoic acids export ABC transporter ATP-binding subunit |
| NW338_03020 | 35   | 160  | 188  | 160  | 177  | 159  | 100  | 88  | 425   | 202   | 157   | 413   | 428  | 67   | 434  | 554          | <i>tagG</i>                                     | TagG                                                      |
| NW338_03025 | 68   | 89   | 53   | 17   | 106  | 102  | 64   | 27  | 102   | 88    | 0     | 66    | 117  | 105  | 166  | 132          | .                                               | CDP-glycerol glycerophosphotransferase family protein     |
| NW338_03030 | 70   | 126  | 64   | 76   | 36   | 131  | 199  | 74  | 106   | 30    | 0     | 46    | 0    | 74   | 0    | 57           | .                                               | glycosyltransferase family 2 protein                      |
| NW338_03035 | 251  | 709  | 187  | 181  | 221  | 102  | 332  | 83  | 0     | 0     | 126   | 89    | 136  | 0    | 140  | <i>tagD</i>  | glycerol-3-phosphate cytidyltransferase         |                                                           |
| NW338_03040 | 0    | 0    | 75   | 20   | 19   | 30   | 8    | 93  | 40    | 12    | 0     | 0     | 195  | 0    | 113  | 59           | <i>pbp4</i>                                     | penicillin-binding protein PBP4                           |
| NW338_03045 | 454  | 394  | 346  | 496  | 315  | 267  | 299  | 384 | 160   | 37    | 321   | 165   | 310  | 231  | 548  | 375          | .                                               | ABC transporter ATP-binding protein/permease              |
| NW338_03050 | 238  | 251  | 100  | 191  | 647  | 386  | 223  | 322 | 0     | 146   | 294   | 254   | 498  | 280  | 849  | 566          | .                                               | NupC/NupG family nucleoside CNT transporter               |
| NW338_03060 | 68   | 34   | 121  | 197  | 127  | 59   | 255  | 172 | 338   | 232   | 283   | 164   | 304  | 98   | 110  | 100          | .                                               | YitT family protein                                       |
| NW338_03065 | 58   | 76   | 110  | 171  | 212  | 276  | 392  | 378 | 74    | 186   | 52    | 63    | 59   | 102  | 0    | 352          | .                                               | ABC transporter ATP-binding protein                       |
| NW338_03070 | 0    | 38   | 29   | 68   | 63   | 160  | 10   | 269 | 60    | 0     | 189   | 24    | 0    | 119  | 0    | 135          | .                                               | iron ABC transporter permease                             |
| NW338_03075 | 0    | 75   | 19   | 11   | 91   | 71   | 149  | 81  | 0     | 32    | 212   | 50    | 35   | 0    | 90   | 25           | .                                               | iron ABC transporter permease                             |
| NW338_03080 | 165  | 138  | 158  | 162  | 105  | 191  | 21   | 135 | 0     | 117   | 284   | 50    | 0    | 81   | 95   | 101          | <i>dhaK</i>                                     | dihydroxyacetone kinase subunit DhaK                      |
| NW338_03085 | 97   | 147  | 177  | 108  | 0    | 109  | 164  | 119 | 104   | 112   | 0     | 0     | 122  | 0    | 0    | 274          | <i>dhaL</i>                                     | dihydroxyacetone kinase subunit DhaL                      |
| NW338_03090 | 357  | 123  | 216  | 84   | 545  | 182  | 195  | 244 | 486   | 44    | 175   | 310   | 98   | 254  | 973  | 529          | <i>dhaM</i>                                     | dihydroxyacetone kinase phosphoryl donor subunit DhaM     |
| NW338_03095 | 316  | 295  | 483  | 784  | 77   | 300  | 491  | 646 | 1746  | 2996  | 2660  | 2572  | 1948 | 1284 | 680  | 1469         | .                                               | hypothetical protein                                      |
| NW338_03100 | 151  | 62   | 207  | 159  | 36   | 79   | 299  | 169 | 0     | 229   | 599   | 506   | 896  | 394  | 335  | 339          | .                                               | hypothetical protein                                      |
| NW338_03105 | 0    | 28   | 28   | 13   | 88   | 6    | 0    | 58  | 0     | 15    | 188   | 235   | 79   | 26   | 0    | 94           | .                                               | alpha/beta hydrolase                                      |
| NW338_03110 | 0    | 59   | 45   | 81   | 0    | 49   | 165  | 27  | 671   | 473   | 848   | 1380  | 551  | 551  | 214  | 584          | .                                               | hypothetical protein                                      |
| NW338_03115 | 91   | 113  | 268  | 165  | 49   | 417  | 200  | 234 | 1056  | 1094  | 5228  | 7623  | 745  | 857  | 2574 | 1543         | .                                               | GNAT family N-acetyltransferase                           |
| NW338_03120 | 0    | 28   | 42   | 144  | 41   | 65   | 67   | 103 | 0     | 221   | 48    | 0     | 120  | 29   | 0    | 92           | <i>graX</i>                                     | auxiliary protein GraX/ApsX                               |
| NW338_03125 | 0    | 14   | 0    | 34   | 168  | 39   | 31   | 17  | 0     | 134   | 0     | 36    | 234  | 96   | 251  | 98           | <i>graR</i>                                     | response regulator transcription factor GraR/ApsR         |
| NW338_03130 | 27   | 101  | 0    | 115  | 65   | 123  | 78   | 23  | 56    | 31    | 85    | 94    | 79   | 269  | 88   | 125          | <i>graS</i>                                     | histidine kinase GraS/ApsS                                |
| NW338_03135 | 37   | 63   | 89   | 43   | 121  | 75   | 54   | 156 | 0     | 21    | 55    | 0     | 0    | 175  | 0    | 251          | <i>vraF</i>                                     | ABC transporter ATP-binding protein VraF                  |
| NW338_03140 | 0    | 71   | 52   | 51   | 0    | 21   | 83   | 67  | 0     | 25    | 22    | 81    | 84   | 22   | 0    | 49           | <i>vraG</i>                                     | ABC transporter permease VraG                             |
| NW338_03145 | 307  | 370  | 104  | 86   | 211  | 181  | 114  | 164 | 95    | 212   | 346   | 763   | 325  | 210  | 548  | 270          | .                                               | DUF47 domain-containing protein                           |
| NW338_03150 | 305  | 265  | 167  | 269  | 63   | 305  | 277  | 172 | 352   | 396   | 387   | 432   | 1032 | 645  | 1046 | 688          | .                                               | inorganic phosphate transporter                           |
| NW338_03155 | 582  | 446  | 480  | 469  | 793  | 1084 | 681  | 702 | 3424  | 2483  | 3356  | 3266  | 1821 | 813  | 4711 | 1755         | .                                               | LysM peptidoglycan-binding domain-containing protein      |
| NW338_03160 | 0    | 69   | 86   | 104  | 59   | 83   | 203  | 18  | 0     | 25    | 130   | 76    | 73   | 42   | 0    | 339          | .                                               | Bax inhibitor-1 family protein                            |
| NW338_03170 | 1801 | 1220 | 692  | 898  | 256  | 166  | 29   | 33  | 0     | 0     | 0     | 297   | 0    | 0    | 0    | 42           | <i>sarX</i>                                     | HTH-type transcriptional regulator SarX                   |
| NW338_03175 | 500  | 355  | 383  | 471  | 487  | 532  | 566  | 598 | 0     | 149   | 0     | 104   | 270  | 128  | 128  | 404          | .                                               | YebC/PmpR family DNA-binding transcriptional regulator    |
| NW338_03180 | 158  | 134  | 220  | 519  | 381  | 78   | 596  | 266 | 235   | 722   | 358   | 51    | 448  | 309  | 357  | 518          | .                                               | cupin domain-containing protein                           |
| NW338_03190 | 183  | 202  | 220  | 248  | 282  | 193  | 142  | 174 | 91    | 75    | 133   | 38    | 110  | 21   | 269  | 294          | .                                               | DUF402 domain-containing protein                          |
| NW338_03195 | 737  | 224  | 445  | 678  | 232  | 163  | 310  | 439 | 138   | 445   | 48    | 114   | 487  | 262  | 247  | 326          | .                                               | LysR family transcriptional regulator                     |
| NW338_03200 | 99   | 44   | 332  | 158  | 258  | 96   | 227  | 318 | 50    | 13    | 86    | 80    | 138  | 12   | 80   | 221          | .                                               | sugar efflux transporter                                  |
| NW338_03205 | 0    | 20   | 53   | 138  | 0    | 99   | 166  | 186 | 129   | 34    | 89    | 453   | 0    | 133  | 0    | 125          | .                                               | DUF456 domain-containing protein                          |
| NW338_03210 | 0    | 23   | 0    | 44   | 55   | 0    | 0    | 0   | 85    | 23    | 64    | 35    | 0    | 20   | 133  | 18           | .                                               | DUF1129 family protein                                    |
| NW338_03215 | 0    | 0    | 44   | 0    | 0    | 0    | 0    | 0   | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0            | .                                               | GNAT family N-acetyltransferase                           |
| NW338_03225 | 95   | 614  | 194  | 46   | 128  | 229  | 69   | 31  | 1125  | 2757  | 1356  | 945   | 489  | 272  | 306  | 449          | .                                               | hypothetical protein                                      |
| NW338_03230 | 52   | 18   | 0    | 21   | 0    | 60   | 0    | 0   | 112   | 89    | 81    | 0     | 0    | 25   | 0    | 0            | .                                               | GNAT family N-acetyltransferase                           |
| NW338_03235 | 76   | 337  | 34   | 151  | 67   | 369  | 294  | 179 | 300   | 403   | 342   | 328   | 332  | 679  | 299  | 635          | .                                               | TIGR00730 family Rossmann fold protein                    |
| NW338_03240 | 0    | 63   | 171  | 121  | 138  | 194  | 45   | 46  | 1027  | 1156  | 1447  | 2307  | 894  | 1289 | 747  | 188          | .                                               | YaiI/YqxD family protein                                  |
| NW338_03245 | 863  | 419  | 452  | 159  | 266  | 276  | 30   | 121 | 585   | 369   | 813   | 680   | 52   | 199  | 382  | 244          | .                                               | hypothetical protein                                      |
| NW338_03250 | 0    | 11   | 56   | 21   | 101  | 83   | 122  | 22  | 120   | 337   | 72    | 299   | 0    | 0    | 0    | 0            | .                                               | undecaprenyl-diphosphate phosphatase                      |
| NW338_03255 | 300  | 162  | 123  | 200  | 69   | 65   | 50   | 88  | 68    | 29    | 103   | 91    | 234  | 229  | 307  | 322          | .                                               | ABC transporter ATP-binding protein/permease              |
| NW338_03260 |      |      |      |      |      |      |      |     |       |       |       |       |      |      |      |              |                                                 |                                                           |

|             |       |       |       |      |      |      |       |       |       |       |       |       |       |       |       |       |              |                                                                                      |
|-------------|-------|-------|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|--------------------------------------------------------------------------------------|
| NW338_03330 | 0     | 135   | 1350  | 959  | 27   | 64   | 450   | 324   | 0     | 0     | 138   | 329   | 413   | 15    | 672   | 587   | <i>pfkB</i>  | 1-phosphofructokinase                                                                |
| NW338_03335 | 228   | 246   | 2078  | 1516 | 66   | 178  | 649   | 547   | 0     | 63    | 772   | 364   | 387   | 248   | 400   | 1937  | .            | fructose-specific PTS transporter subunit EIIC                                       |
| NW338_03340 | 0     | 54    | 143   | 67   | 153  | 50   | 26    | 62    | 0     | 0     | 35    | 21    | 90    | 35    | 0     | 57    | <i>nagA</i>  | N-acetylglucosamine-6-phosphate deacetylase                                          |
| NW338_03345 | 361   | 510   | 634   | 814  | 286  | 229  | 629   | 488   | 0     | 187   | 207   | 110   | 231   | 187   | 455   | 164   | .            | hemolysin family protein                                                             |
| NW338_03350 | 51    | 144   | 93    | 44   | 196  | 195  | 25    | 34    | 0     | 108   | 231   | 89    | 217   | 93    | 201   | 124   | .            | aldo/keto reductase                                                                  |
| NW338_03355 | 164   | 113   | 66    | 52   | 158  | 58   | 77    | 0     | 398   | 240   | 308   | 356   | 84    | 132   | 93    | 172   | <i>csbB</i>  | lipoteichoic acid-specific glycosylation protein CsbB                                |
| NW338_03360 | 510   | 890   | 938   | 1472 | 1304 | 710  | 922   | 1193  | 1041  | 825   | 1862  | 1434  | 1695  | 1690  | 1493  | 1161  | <i>soeS</i>  | two-component system sensor histidine kinase SaeS                                    |
| NW338_03365 | 1358  | 1915  | 1738  | 3201 | 1654 | 1693 | 1289  | 2603  | 1001  | 1118  | 1063  | 1328  | 2599  | 1978  | 4812  | 1258  | <i>soeR</i>  | response regulator transcription factor SaeR                                         |
| NW338_03370 | 469   | 545   | 899   | 1122 | 620  | 125  | 218   | 761   | 699   | 727   | 853   | 1625  | 724   | 2006  | 745   | 998   | .            | DoxX family protein                                                                  |
| NW338_03375 | 388   | 462   | 707   | 1396 | 209  | 152  | 472   | 699   | 256   | 876   | 2425  | 3278  | 2636  | 3822  | 1403  | 2250  | .            | DM13 domain-containing protein                                                       |
| NW338_03380 | 79    | 33    | 167   | 64   | 0    | 32   | 138   | 32    | 204   | 598   | 583   | 295   | 141   | 23    | 0     | 217   | .            | hypothetical protein                                                                 |
| NW338_03385 | 105   | 67    | 0     | 94   | 35   | 75   | 113   | 156   | 85    | 161   | 0     | 0     | 0     | 19    | 480   | 0     | <i>queE</i>  | 7-carboxy-7-deazaguanine synthase QueE                                               |
| NW338_03390 | 171   | 0     | 46    | 60   | 0    | 48   | 144   | 22    | 0     | 0     | 100   | 0     | 112   | 32    | 0     | 73    | <i>queD</i>  | 6-carboxytetrahydropterin synthase QueD                                              |
| NW338_03395 | 0     | 0     | 0     | 0    | 37   | 18   | 15    | 35    | 0     | 0     | 0     | 73    | 0     | 20    | 0     | 0     | <i>queC</i>  | 7-cyano-7-deazaguanine synthase QueC                                                 |
| NW338_03400 | 0     | 0     | 0     | 0    | 0    | 10   | 0     | 0     | 0     | 0     | 75    | 0     | 0     | 23    | 0     | 51    | .            | aminooxychorismate/anthranilate synthase component II                                |
| NW338_03405 | 0     | 8     | 0     | 10   | 43   | 40   | 70    | 10    | 0     | 14    | 0     | 0     | 0     | 12    | 0     | 11    | .            | anthranilate synthase component I family protein                                     |
| NW338_03410 | 0     | 0     | 0     | 92   | 0    | 64   | 0     | 19    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 29    | .            | aminotransferase class IV                                                            |
| NW338_03420 | 61    | 67    | 100   | 71   | 0    | 30   | 99    | 27    | 0     | 70    | 0     | 0     | 100   | 19    | 0     | 18    | .            | allophanate hydrolase subunit 1                                                      |
| NW338_03425 | 0     | 99    | 68    | 134  | 67   | 68   | 41    | 90    | 0     | 0     | 83    | 24    | 303   | 173   | 91    | 56    | .            | biotin-dependent carboxyltransferase family protein                                  |
| NW338_03430 | 365   | 325   | 369   | 369  | 186  | 286  | 210   | 401   | 1195  | 1323  | 1103  | 628   | 461   | 588   | 759   | 349   | <i>ltaS</i>  | polyglycerol-phosphate lipoteichoic acid synthase LtaS                               |
| NW338_03435 | 38    | 76    | 294   | 248  | 211  | 167  | 537   | 301   | 28    | 0     | 0     | 39    | 113   | 49    | 0     | 116   | .            | ABC-F family ATP-binding cassette domain-containing protein                          |
| NW338_03440 | 80    | 45    | 87    | 146  | 35   | 64   | 149   | 111   | 29    | 9     | 23    | 27    | 82    | 8     | 0     | 43    | <i>recQ</i>  | DNA helicase RecQ                                                                    |
| NW338_03445 | 106   | 101   | 142   | 53   | 65   | 198  | 197   | 171   | 107   | 16    | 0     | 0     | 36    | 185   | 178   | 131   | .            | ABC transporter ATP-binding protein                                                  |
| NW338_03450 | 135   | 116   | 180   | 110  | 206  | 84   | 301   | 222   | 108   | 53    | 29    | 49    | 24    | 182   | 172   | 123   | .            | ABC transporter permease/substrate-binding protein                                   |
| NW338_03455 | 44    | 24    | 226   | 72   | 107  | 43   | 326   | 211   | 0     | 0     | 39    | 0     | 0     | 0     | 0     | 76    | <i>hisC</i>  | histidinol-phosphate transaminase                                                    |
| NW338_03460 | 52    | 76    | 107   | 198  | 238  | 98   | 94    | 328   | 0     | 0     | 198   | 0     | 87    | 315   | 0     | 23    | .            | 5'(3')-deoxyribonucleotidase                                                         |
| NW338_03465 | 151   | 183   | 178   | 131  | 362  | 324  | 22    | 86    | 548   | 428   | 326   | 224   | 141   | 489   | 390   | 506   | .            | diacylglycerol kinase family lipid kinase                                            |
| NW338_03475 | 435   | 495   | 449   | 449  | 814  | 833  | 489   | 396   | 154   | 130   | 169   | 175   | 354   | 465   | 758   | 365   | .            | peptide MFS transporter                                                              |
| NW338_03485 | 0     | 83    | 0     | 65   | 0    | 65   | 21    | 0     | 222   | 32    | 0     | 250   | 0     | 212   | 367   | 86    | <i>queF</i>  | preQ(1) synthase                                                                     |
| NW338_03490 | 0     | 0     | 34    | 67   | 0    | 45   | 12    | 11    | 0     | 57    | 99    | 0     | 0     | 16    | 195   | 56    | .            | DMT family transporter                                                               |
| NW338_03495 | 71    | 495   | 740   | 419  | 674  | 466  | 685   | 732   | 152   | 40    | 321   | 630   | 739   | 1345  | 461   | 909   | <i>nrdl</i>  | class 1b ribonucleoside-diphosphate reductase subunit alpha                          |
| NW338_03500 | 529   | 715   | 719   | 732  | 351  | 471  | 895   | 897   | 138   | 140   | 155   | 178   | 575   | 316   | 287   | 592   | <i>nrdE</i>  | class 1b ribonucleoside-diphosphate reductase subunit beta                           |
| NW338_03505 | 629   | 577   | 728   | 518  | 780  | 559  | 503   | 398   | 116   | 153   | 111   | 235   | 701   | 366   | 189   | 527   | <i>nrdf</i>  | ABC transporter permease                                                             |
| NW338_03515 | 48    | 16    | 20    | 14   | 0    | 0    | 11    | 0     | 0     | 0     | 43    | 0     | 0     | 0     | 0     | 0     | .            | iron chelate uptake ABC transporter family permease subunit                          |
| NW338_03520 | 45    | 0     | 20    | 0    | 0    | 6    | 0     | 12    | 0     | 0     | 46    | 0     | 0     | 0     | 0     | 0     | .            | ABC transporter ATP-binding protein                                                  |
| NW338_03525 | 0     | 0     | 0     | 15   | 0    | 0    | 0     | 43    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 89    | .            | siderophore ABC transporter substrate-binding protein                                |
| NW338_03530 | 0     | 0     | 19    | 50   | 37   | 53   | 152   | 37    | 161   | 151   | 0     | 122   | 183   | 116   | 89    | 67    | .            | CHY zinc finger protein                                                              |
| NW338_03535 | 0     | 101   | 144   | 81   | 0    | 20   | 33    | 37    | 0     | 0     | 179   | 0     | 163   | 0     | 178   | 0     | .            | UDP-N-acetylmuramate dehydrogenase                                                   |
| NW338_03540 | 93    | 152   | 53    | 93   | 222  | 145  | 126   | 125   | 129   | 53    | 117   | 53    | 120   | 85    | 100   | 242   | <i>murB</i>  | GrpB family protein                                                                  |
| NW338_03545 | 0     | 0     | 0     | 0    | 74   | 0    | 0     | 0     | 0     | 31    | 171   | 0     | 0     | 151   | 0     | 25    | .            | EMYY motif lipoprotein                                                               |
| NW338_03550 | 85    | 58    | 81    | 13   | 28   | 44   | 86    | 11    | 138   | 93    | 72    | 0     | 87    | 296   | 0     | 80    | .            | bacillithiol system redox-active protein YtxJ                                        |
| NW338_03555 | 233   | 228   | 141   | 166  | 238  | 123  | 0     | 0     | 183   | 304   | 138   | 0     | 0     | 0     | 0     | 135   | <i>ytxJ</i>  | glycerate kinase                                                                     |
| NW338_03560 | 156   | 96    | 309   | 146  | 220  | 148  | 64    | 167   | 105   | 81    | 116   | 65    | 130   | 109   | 0     | 338   | .            | peptidase T                                                                          |
| NW338_03565 | 695   | 420   | 529   | 582  | 481  | 456  | 366   | 391   | 148   | 133   | 297   | 287   | 137   | 517   | 623   | 362   | <i>pepT</i>  | threonine/serine exporter family protein                                             |
| NW338_03570 | 0     | 0     | 91    | 75   | 0    | 137  | 63    | 24    | 0     | 183   | 0     | 163   | 167   | 27    | 684   | 51    | .            | threonine/serine exporter ThrE family protein                                        |
| NW338_03575 | 0     | 21    | 0     | 0    | 33   | 16   | 41    | 50    | 0     | 42    | 0     | 180   | 0     | 18    | 456   | 57    | .            | GGDEF domain-containing protein                                                      |
| NW338_03580 | 137   | 65    | 48    | 87   | 0    | 39   | 0     | 38    | 113   | 130   | 179   | 98    | 77    | 51    | 0     | 160   | .            | undecaprenyl/decaprenyl-phosphate alpha-N-acetylglucosaminyl 1-phosphate transferase |
| NW338_03585 | 68    | 9     | 107   | 26   | 100  | 80   | 10    | 51    | 57    | 62    | 0     | 69    | 0     | 240   | 0     | 161   | .            | YigZ family protein                                                                  |
| NW338_03590 | 44    | 253   | 90    | 273  | 105  | 198  | 48    | 196   | 367   | 497   | 570   | 426   | 0     | 368   | 143   | 150   | .            | fatty acid kinase binding subunit FakB1                                              |
| NW338_03595 | 83    | 194   | 220   | 201  | 472  | 269  | 141   | 122   | 0     | 18    | 73    | 0     | 95    | 367   | 106   | 167   | <i>fakB1</i> | DEAD/DEAH box helicase                                                               |
| NW338_03600 | 0     | 15    | 0     | 0    | 0    | 0    | 9     | 20    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 12    | .            | ComF family protein                                                                  |
| NW338_03605 | 0     | 0     | 38    | 28   | 0    | 9    | 0     | 14    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | .            | ribosome-associated translation inhibitor RaiA                                       |
| NW338_03610 | 13422 | 10247 | 5377  | 7046 | 6418 | 7952 | 2961  | 5193  | 16255 | 11293 | 10389 | 11485 | 8053  | 9776  | 7298  | 12051 | <i>raiA</i>  | preprotein translocase subunit SecA                                                  |
| NW338_03615 | 333   | 426   | 671   | 707  | 535  | 461  | 704   | 894   | 44    | 71    | 238   | 183   | 576   | 245   | 206   | 340   | <i>secA</i>  | peptide chain release factor 2                                                       |
| NW338_03625 | 106   | 132   | 289   | 253  | 231  | 215  | 270   | 332   | 0     | 14    | 159   | 89    | 119   | 200   | 356   | 170   | <i>prfB</i>  | CHAP domain-containing protein                                                       |
| NW338_03630 | 0     | 0     | 0     | 47   | 59   | 69   | 430   | 249   | 144   | 19    | 102   | 259   | 0     | 32    | 0     | 0     | .            | HD domain-containing protein                                                         |
| NW338_03635 | 0     | 112   | 199   | 0    | 0    | 0    | 33    | 0     | 25    | 0     | 86    | 0     | 21    | 0     | 66    | 0     | .            | CsbA family protein                                                                  |
| NW338_03640 | 196   | 0     | 0     | 49   | 0    | 86   | 44    | 0     | 0     | 0     | 0     | 0     | 469   | 0     | 0     | 0     | .            | excinuclease ABC subunit UvrB                                                        |
| NW338_03645 | 115   | 112   | 201   | 203  | 121  | 205  | 349   | 386   | 261   | 202   | 108   | 207   | 126   | 416   | 586   | 194   | <i>uvrB</i>  | excinuclease ABC subunit UvrA                                                        |
| NW338_03650 | 168   | 157   | 226   | 253  | 152  | 135  | 204   | 294   | 137   | 148   | 111   | 277   | 193   | 162   | 248   | 172   | <i>uvrA</i>  | HPr(Ser) kinase/phosphatase                                                          |
| NW338_03655 | 391   | 96    | 338   | 221  | 285  | 290  | 321   | 177   | 0     | 326   | 187   | 80    | 195   | 198   | 280   | 146   | <i>hprK</i>  | prolipoprotein diacylglycerol transferase                                            |
| NW338_03660 | 55    | 61    | 116   | 108  | 215  | 185  | 182   | 223   | 134   | 127   | 280   | 127   | 244   | 126   | 207   | 290   | <i>lgt</i>   | acetyltransferase                                                                    |
| NW338_03665 | 633   | 471   | 294   | 412  | 103  | 93   | 262   | 211   | 341   | 319   | 268   | 116   | 534   | 724   | 0     | 785   | .            | tetratricopeptide repeat protein                                                     |
| NW338_03670 | 52    | 80    | 99    | 168  | 61   | 71   | 121   | 144   | 36    | 0     | 73    | 104   | 49    | 247   | 302   | 345   | .            | thioredoxin-disulfide reductase                                                      |
| NW338_03675 | 796   | 973   | 2502  | 3205 | 1629 | 1204 | 2562  | 2691  | 415   | 184   | 670   | 625   | 321   | 299   | 284   | 413   | <i>trxB</i>  | RNase adapter RapZ                                                                   |
| NW338_03685 | 164   | 244   | 301   | 236  | 193  | 106  | 125   | 163   | 58    | 117   | 164   | 89    | 52    | 221   | 0     | 134   | <i>rapZ</i>  | Yvck family protein                                                                  |
| NW338_03690 | 445   | 227   | 323   | 550  | 139  | 161  | 135   | 196   | 105   | 0     | 220   | 257   | 290   | 645   | 451   | 696   | .            | DNA-binding protein WhiA                                                             |
| NW338_03695 | 235   | 513   | 318   | 587  | 360  | 165  | 195   | 451   | 495   | 604   | 476   | 421   | 451   | 698   | 742   | 703   | <i>whiA</i>  | ATP-dependent Clp endopeptidase proteolytic subunit ClpP                             |
| NW338_03700 | 1108  | 943   | 3254  | 4118 | 1511 | 1004 | 3344  | 4218  | 482   | 832   | 4752  | 5470  | 1056  | 411   | 904   | 1735  | <i>clpP</i>  | TIGR01777 family oxidoreductase                                                      |
| NW338_03705 | 150   | 162   | 137   | 149  | 42   | 34   | 118   | 21    | 448   | 179   | 303   | 413   | 320   | 178   | 572   | 163   | .            | DUF4887 domain-containing protein                                                    |
| NW338_03710 | 256   | 177   | 625   | 476  | 546  | 219  | 309   | 71    | 276   | 223   | 171   | 506   | 131   | 401   | 828   | 517   | .            | sugar-binding transcriptional regulator                                              |
| NW338_03715 | 320   | 267   | 3528  | 4773 | 2565 | 4348 | 6381  | 6881  | 3361  | 3619  | 7896  | 7696  | 13669 | 13233 | 10536 | 7693  | .            | type I glyceraldehyde-3-phosphate dehydrogenase                                      |
| NW338_03720 | 3896  | 4381  | 10832 | 9789 | 7365 | 7254 | 13444 | 9245  | 1340  | 1092  | 1440  | 1154  | 2675  | 2513  | 2190  | 3069  | <i>gap</i>   | phosphoglycerate kinase                                                              |
| NW338_03725 | 2295  | 2664  | 3962  | 4080 | 2945 | 2785 | 4780  | 4092  | 341   | 388   | 902   | 751   | 3334  | 3196  | 3385  | 2570  | .            | triose-phosphate isomerase                                                           |
| NW338_03730 | 4174  | 3830  | 5802  | 7054 | 8828 | 7564 | 11955 | 11483 | 1010  | 1024  | 1465  | 986   | 3433  | 3798  | 5196  | 2376  | <i>tpiA</i>  | 2,3-bisphosphoglycerate-independent phosphoglycerate mutase                          |
| NW338_03735 | 2155  | 2428  | 3316  | 3357 | 1394 | 1724 | 2494  | 2422  | 188   | 139   | 227   | 264   | 1546  | 1418  | 934   | 1227  | <i>gpmI</i>  | phosphopyruvate hydratase                                                            |
| NW338_03740 | 5749  | 4988  | 4904  | 5173 | 4649 | 4946 | 4302  | 4768  | 1252  | 1305  | 1444  | 1707  |       |       |       |       |              |                                                                                      |

|             |       |       |       |       |       |       |      |      |       |       |       |      |       |       |       |            |                                                            |
|-------------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|------|-------|-------|-------|------------|------------------------------------------------------------|
| NW338_03855 | 0     | 0     | 0     | 11    | 0     | 0     | 0    | 0    | 0     | 0     | 221   | 35   | 114   | 0     | 53    | <i>emp</i> | extracellular matrix protein-binding adhesin Emp           |
| NW338_03860 | 0     | 0     | 0     | 0     | 0     | 12    | 0    | 0    | 0     | 0     | 0     | 0    | 76    | 29    | 0     | 181        | hypothetical protein                                       |
| NW338_03865 | 348   | 339   | 392   | 318   | 492   | 261   | 118  | 91   | 0     | 23    | 218   | 73   | 0     | 166   | 0     | 124        | thermonuclease family protein                              |
| NW338_03870 | 13718 | 14580 | 20894 | 13078 | 17953 | 15473 | 9992 | 9579 | 19028 | 22484 | 9699  | 8871 | 16512 | 9385  | 5171  | 11789      | cold-shock protein                                         |
| NW338_03875 | 0     | 0     | 0     | 127   | 307   | 0     | 0    | 54   | 0     | 73    | 290   | 257  | 215   | 0     | 0     | 0          | hypothetical protein                                       |
| NW338_03880 | 100   | 0     | 0     | 0     | 0     | 23    | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0          | hypothetical protein                                       |
| NW338_03885 | 0     | 0     | 0     | 0     | 0     | 0     | 106  | 0    | 0     | 0     | 0     | 0    | 0     | 24    | 0     | 22         | hypothetical protein                                       |
| NW338_03890 | 0     | 84    | 0     | 196   | 264   | 33    | 0    | 50   | 910   | 1307  | 1107  | 823  | 0     | 72    | 0     | 161        | hypothetical protein                                       |
| NW338_03895 | 165   | 268   | 74    | 72    | 0     | 24    | 271  | 36   | 0     | 497   | 490   | 525  | 317   | 0     | 0     | 98         | hypothetical protein                                       |
| NW338_03900 | 631   | 873   | 366   | 217   | 330   | 294   | 51   | 58   | 3542  | 5089  | 4475  | 2960 | 929   | 1103  | 852   | 2088       | sterile alpha motif-like domain-containing protein         |
| NW338_03905 | 889   | 443   | 0     | 146   | 372   | 253   | 0    | 90   | 2082  | 2521  | 3762  | 2111 | 4041  | 5074  | 1509  | 4151       | hypothetical protein                                       |
| NW338_03910 | 123   | 44    | 111   | 24    | 86    | 11    | 121  | 67   | 101   | 83    | 181   | 97   | 414   | 70    | 158   | 260        | phosphoglycerate mutase family protein                     |
| NW338_03915 | 0     | 0     | 127   | 41    | 40    | 0     | 122  | 19   | 0     | 0     | 0     | 0    | 134   | 0     | 281   | 49         | LysE/ArgO family amino acid transporter                    |
| NW338_03920 | 0     | 173   | 550   | 250   | 360   | 523   | 188  | 424  | 122   | 65    | 179   | 314  | 524   | 55    | 528   | 357        | GNAT family N-acetyltransferase                            |
| NW338_03925 | 0     | 23    | 0     | 104   | 159   | 96    | 0    | 50   | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 30         | organic hydroperoxide resistance protein                   |
| NW338_03930 | 65    | 13    | 36    | 19    | 35    | 47    | 14   | 0    | 0     | 22    | 0     | 0    | 0     | 38    | 0     | 0          | type I 3-dehydroquinate dehydratase                        |
| NW338_03935 | 219   | 283   | 313   | 388   | 949   | 690   | 548  | 668  | 330   | 148   | 545   | 746  | 948   | 171   | 654   | 348        | nitroreductase                                             |
| NW338_03940 | 312   | 159   | 626   | 963   | 431   | 366   | 1908 | 1123 | 516   | 250   | 749   | 479  | 773   | 85    | 1069  | 927        | thioredoxin family protein                                 |
| NW338_03945 | 331   | 303   | 209   | 351   | 532   | 509   | 661  | 729  | 0     | 45    | 0     | 278  | 543   | 412   | 732   | 392        | arsenate reductase family protein                          |
| NW338_03950 | 1783  | 1621  | 901   | 1067  | 1799  | 1239  | 1473 | 1115 | 6598  | 4265  | 4526  | 4706 | 1844  | 1886  | 1851  | 1602       | glycine cleavage system protein GcvH                       |
| NW338_03955 | 0     | 29    | 73    | 68    | 133   | 89    | 161  | 36   | 0     | 74    | 0     | 28   | 207   | 62    | 0     | 77         | YwqG family protein                                        |
| NW338_03960 | 0     | 0     | 0     | 84    | 163   | 54    | 107  | 0    | 157   | 169   | 114   | 0    | 121   | 342   | 0     | 46         | toprim domain-containing protein                           |
| NW338_03965 | 145   | 0     | 0     | 229   | 84    | 42    | 35   | 40   | 0     | 0     | 0     | 0    | 120   | 46    | 0     | 0          | thioredoxin family protein                                 |
| NW338_03970 | 90    | 25    | 0     | 195   | 315   | 184   | 228  | 197  | 0     | 48    | 43    | 104  | 189   | 167   | 593   | 145        | methionine ABC transporter ATP-binding protein             |
| NW338_03975 | 67    | 78    | 215   | 93    | 237   | 121   | 240  | 198  | 75    | 23    | 0     | 0    | 0     | 266   | 499   | 115        | ABC transporter permease                                   |
| NW338_03980 | 56    | 85    | 91    | 158   | 198   | 97    | 253  | 103  | 0     | 0     | 0     | 30   | 0     | 95    | 0     | 37         | MetQ/NlpA family ABC transporter substrate-binding protein |
| NW338_03985 | 9313  | 5777  | 4046  | 2701  | 3602  | 2163  | 777  | 961  | 22303 | 25929 | 12698 | 7763 | 11985 | 15375 | 10735 | 8801       | CsbD family protein                                        |
| NW338_03990 | 202   | 138   | 68    | 180   | 153   | 14    | 61   | 0    | 0     | 125   | 176   | 290  | 222   | 313   | 312   | 152        | DUF368 domain-containing protein                           |
| NW338_03995 | 460   | 364   | 700   | 470   | 590   | 461   | 905  | 493  | 0     | 182   | 58    | 164  | 232   | 417   | 222   | 354        | Fe-S cluster assembly ATPase SufC                          |
| NW338_04000 | 238   | 625   | 570   | 430   | 401   | 526   | 1000 | 825  | 131   | 296   | 167   | 119  | 549   | 672   | 492   | 430        | Fe-S cluster assembly protein SufD                         |
| NW338_04005 | 548   | 663   | 683   | 708   | 448   | 418   | 834  | 801  | 238   | 137   | 238   | 280  | 265   | 744   | 650   | 692        | cysteine desulfurase                                       |
| NW338_04010 | 1122  | 691   | 899   | 419   | 644   | 272   | 459  | 475  | 0     | 0     | 136   | 0    | 493   | 169   | 728   | 591        | SUF system NifU family Fe-S cluster assembly protein       |
| NW338_04015 | 810   | 731   | 480   | 804   | 427   | 580   | 773  | 764  | 607   | 658   | 294   | 475  | 730   | 1067  | 681   | 1052       | Fe-S cluster assembly protein SufB                         |
| NW338_04025 | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 40         | hypothetical protein                                       |
| NW338_04030 | 72    | 64    | 72    | 100   | 37    | 83    | 117  | 114  | 0     | 31    | 42    | 54   | 0     | 62    | 0     | 164        | CNNM domain-containing protein                             |
| NW338_04035 | 121   | 48    | 231   | 98    | 99    | 73    | 263  | 203  | 0     | 46    | 39    | 146  | 0     | 86    | 86    | 52         | nitronate monooxygenase family protein                     |
| NW338_04045 | 34    | 71    | 65    | 46    | 138   | 124   | 108  | 130  | 0     | 96    | 223   | 57   | 131   | 221   | 0     | 72         | DUF72 domain-containing protein                            |
| NW338_04050 | 104   | 31    | 55    | 51    | 76    | 119   | 207  | 23   | 63    | 0     | 104   | 186  | 129   | 16    | 0     | 68         | sulfite exporter TauE/Safe family protein                  |
| NW338_04055 | 70    | 15    | 169   | 181   | 38    | 89    | 100  | 107  | 223   | 0     | 97    | 141  | 0     | 21    | 0     | 116        | bifunctional metallophosphatase/5'-nucleotidase            |
| NW338_04060 | 230   | 368   | 576   | 645   | 661   | 577   | 813  | 948  | 121   | 141   | 559   | 515  | 1150  | 771   | 474   | 959        | lipoyl synthase                                            |
| NW338_04065 | 0     | 0     | 50    | 147   | 0     | 87    | 184  | 92   | 0     | 42    | 109   | 0    | 0     | 204   | 0     | 172        | YutD family protein                                        |
| NW338_04070 | 0     | 0     | 0     | 122   | 0     | 79    | 0    | 44   | 0     | 60    | 238   | 400  | 0     | 51    | 0     | 114        | DUF3055 domain-containing protein                          |
| NW338_04075 | 165   | 125   | 44    | 123   | 176   | 156   | 24   | 0    | 0     | 0     | 0     | 116  | 380   | 456   | 0     | 284        | DUF86 domain-containing protein                            |
| NW338_04080 | 279   | 192   | 71    | 119   | 606   | 804   | 189  | 278  | 0     | 104   | 57    | 233  | 0     | 70    | 335   | 188        | TIGR01457 family HAD-type hydrolase                        |
| NW338_04085 | 380   | 378   | 40    | 228   | 176   | 323   | 64   | 61   | 118   | 117   | 269   | 130  | 288   | 263   | 534   | 345        | D-glycerate dehydrogenase                                  |
| NW338_04095 | 0     | 0     | 0     | 91    | 0     | 0     | 0    | 62   | 0     | 105   | 273   | 330  | 959   | 695   | 0     | 83         | teichoic acid D-Ala incorporation-associated protein DltX  |
| NW338_04100 | 81    | 142   | 207   | 195   | 568   | 564   | 604  | 519  | 155   | 67    | 30    | 33   | 154   | 399   | 0     | 260        | D-alanine-poly(phosphoribitol) ligase subunit DltA         |
| NW338_04105 | 286   | 296   | 481   | 297   | 572   | 458   | 680  | 392  | 0     | 93    | 109   | 232  | 651   | 619   | 947   | 632        | PG-teichoic acid D-alanyltransferase DltB                  |
| NW338_04110 | 196   | 0     | 327   | 333   | 478   | 302   | 218  | 347  | 0     | 0     | 0     | 103  | 349   | 172   | 733   | 225        | D-alanine-poly(phosphoribitol) ligase subunit 2            |
| NW338_04115 | 274   | 338   | 267   | 316   | 1127  | 759   | 705  | 495  | 102   | 69    | 0     | 139  | 544   | 377   | 662   | 443        | D-alanyl-lipoteichoic acid biosynthesis protein DltD       |
| NW338_04120 | 0     | 367   | 308   | 822   | 569   | 791   | 843  | 1502 | 998   | 396   | 1310  | 647  | 1554  | 758   | 1453  | 1618       | NifU family protein                                        |
| NW338_04125 | 133   | 79    | 80    | 94    | 0     | 57    | 0    | 0    | 187   | 478   | 137   | 405  | 0     | 42    | 0     | 0          | YuzD family protein                                        |
| NW338_04135 | 120   | 40    | 479   | 187   | 105   | 198   | 87   | 248  | 248   | 0     | 187   | 0    | 150   | 0     | 714   | 107        | YuzB family protein                                        |
| NW338_04140 | 240   | 327   | 569   | 683   | 901   | 436   | 1262 | 779  | 955   | 408   | 1549  | 864  | 329   | 589   | 511   | 512        | iron-sulfur cluster assembly accessory protein             |
| NW338_04145 | 488   | 408   | 562   | 596   | 1076  | 890   | 1299 | 1067 | 527   | 120   | 393   | 551  | 935   | 418   | 576   | 400        | NAD(P)/FAD-dependent oxidoreductase                        |
| NW338_04150 | 39    | 43    | 106   | 164   | 148   | 79    | 171  | 39   | 0     | 55    | 100   | 55   | 160   | 271   | 62    | 67         | M17 family metallopeptidase                                |
| NW338_04155 | 0     | 36    | 120   | 325   | 38    | 182   | 516  | 654  | 0     | 36    | 48    | 98   | 27    | 172   | 132   | 82         | Na <sup>+</sup> /H <sup>+</sup> antiporter family protein  |
| NW338_04160 | 191   | 0     | 224   | 210   | 0     | 0     | 138  | 337  | 0     | 43    | 568   | 529  | 0     | 0     | 0     | 0          | Paal family thioesterase                                   |
| NW338_04165 | 0     | 0     | 73    | 36    | 0     | 0     | 52   | 66   | 0     | 0     | 184   | 205  | 0     | 0     | 150   | 11         | FAD/NAD(P)-binding protein                                 |
| NW338_04170 | 201   | 490   | 108   | 234   | 70    | 92    | 29   | 231  | 317   | 254   | 0     | 0    | 468   | 0     | 0     | 356        | Na <sup>+</sup> /H <sup>+</sup> antiporter Mnh1 subunit G  |
| NW338_04175 | 305   | 293   | 176   | 427   | 85    | 132   | 257  | 104  | 0     | 0     | 0     | 192  | 761   | 637   | 313   | 458        | Na <sup>+</sup> /H <sup>+</sup> antiporter Mnh1 subunit F  |
| NW338_04180 | 90    | 173   | 102   | 203   | 52    | 125   | 43   | 91   | 0     | 136   | 394   | 105  | 196   | 28    | 0     | 345        | Na <sup>+</sup> /H <sup>+</sup> antiporter Mnh1 subunit E  |
| NW338_04185 | 234   | 244   | 193   | 270   | 188   | 335   | 397  | 314  | 39    | 33    | 57    | 158  | 166   | 180   | 352   | 221        | Na <sup>+</sup> /H <sup>+</sup> antiporter Mnh1 subunit D  |
| NW338_04190 | 262   | 476   | 407   | 95    | 0     | 36    | 0    | 83   | 0     | 145   | 0     | 148  | 588   | 660   | 2036  | 543        | Na <sup>+</sup> /H <sup>+</sup> antiporter Mnh1 subunit C  |
| NW338_04195 | 275   | 304   | 568   | 281   | 116   | 174   | 176  | 90   | 282   | 423   | 0     | 57   | 176   | 294   | 0     | 381        | Na <sup>+</sup> /H <sup>+</sup> antiporter Mnh1 subunit B  |
| NW338_04200 | 166   | 255   | 343   | 410   | 343   | 337   | 313  | 247  | 50    | 20    | 161   | 75   | 312   | 477   | 345   | 363        | Na <sup>+</sup> /H <sup>+</sup> antiporter Mnh1 subunit A  |
| NW338_04205 | 233   | 190   | 0     | 121   | 130   | 140   | 0    | 31   | 0     | 42    | 0     | 0    | 134   | 0     | 33    | 0          | kinase-associated lipoprotein B                            |
| NW338_04210 | 770   | 429   | 485   | 363   | 262   | 276   | 223  | 345  | 0     | 27    | 177   | 313  | 139   | 69    | 293   | 43         | peptidylprolyl isomerase                                   |
| NW338_04215 | 976   | 767   | 1416  | 553   | 1347  | 704   | 242  | 253  | 611   | 1863  | 1349  | 823  | 1308  | 1680  | 448   | 1104       | S1 domain-containing post-transcriptional regulator Ygs    |
| NW338_04220 | 327   | 96    | 432   | 770   | 354   | 246   | 330  | 411  | 54    | 28    | 0     | 412  | 32    | 127   | 163   | 74         | NADH-dependent flavin oxidoreductase                       |
| NW338_04225 | 876   | 840   | 706   | 670   | 464   | 347   | 196  | 266  | 341   | 448   | 343   | 190  | 742   | 755   | 669   | 970        | ornithine-oxo-oxo transaminase                             |
| NW338_04230 | 1194  | 1225  | 1295  | 872   | 751   | 759   | 514  | 593  | 1106  | 1253  | 1157  | 881  | 1166  | 2871  | 2124  | 2243       | Glu/Leu/Phe/Val dehydrogenase                              |
| NW338_04235 | 46    | 17    | 83    | 0     | 153   | 56    | 191  | 56   | 0     | 17    | 93    | 0    | 51    | 15    | 380   | 90         | glycerophosphodiester phosphodiesterase                    |
| NW338_04240 | 41    | 58    | 33    | 212   | 200   | 543   | 423  | 647  | 673   | 418   | 265   | 227  | 26    | 84    | 0     | 58         | argininosuccinate lyase                                    |
| NW338_04245 | 74    | 87    | 59    | 129   | 255   | 414   | 663  | 496  | 188   | 143   | 53    | 67   | 0     | 0     | 0     | 85         | argininosuccinate synthase                                 |
| NW338_04250 | 1088  | 1116  | 1488  | 1399  | 1420  | 1385  | 1333 | 1959 | 249   | 289   | 535   | 367  | 625   | 637   | 265   | 653        | glucose-6-phosphate isomerase                              |
| NW338_04255 | 0     | 0     | 147   | 20    | 0     | 114   | 0    | 94   | 0     | 0     | 0     | 88   | 0     | 178   | 302   | 203        | TVP38/TMEM64 family protein                                |
| NW338_04260 | 0     | 30    | 142   | 48    | 48    | 249   | 164  | 36   | 0     | 173   | 164   | 0    | 90    | 26    | 0     | 34         | signal peptidase I                                         |
| NW338_04265 | 75    | 161   | 163   | 150   | 204   | 21    | 0    | 141  | 594   | 111   | 264   | 185  | 378   | 178   | 0     | 287        | signal peptidase I                                         |
| NW338_04270 | 59    | 113   | 167   | 136   | 98    | 88    | 133  | 172  | 82    | 35    | 73    | 85   | 242   | 144   | 322   | 136        | helicase-exonuclease AddAB subunit AddB                    |
| NW338_04275 | 195   | 123   | 181   | 172   | 140   |       |      |      |       |       |       |      |       |       |       |            |                                                            |

|             |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |             |                       |                                                                                           |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------|-----------------------|-------------------------------------------------------------------------------------------|
| NW338_04365 | 40    | 86    | 210  | 152  | 46   | 104  | 154  | 108  | 0    | 0    | 0    | 0    | 76   | 85   | 160  | 40          | .                     | ABC transporter ATP-binding protein                                                       |
| NW338_04370 | 0     | 64    | 138  | 131  | 0    | 42   | 22   | 74   | 0    | 96   | 44   | 54   | 188  | 141  | 277  | 157         | .                     | ATP-binding cassette domain-containing protein                                            |
| NW338_04375 | 56    | 156   | 147  | 160  | 140  | 44   | 183  | 103  | 63   | 40   | 27   | 49   | 160  | 64   | 102  | 26          | .                     | peptide ABC transporter substrate-binding protein                                         |
| NW338_04385 | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | .                     | ABC transporter ATP-binding protein                                                       |
| NW338_04395 | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | .                     | ABC transporter permease                                                                  |
| NW338_04400 | 0     | 0     | 29   | 13   | 0    | 0    | 0    | 13   | 0    | 0    | 0    | 0    | 0    | 30   | 0    | 28          | .                     | ABC transporter permease                                                                  |
| NW338_04405 | 177   | 58    | 69   | 124  | 192  | 209  | 414  | 164  | 121  | 16   | 45   | 25   | 0    | 26   | 0    | 0           | <i>trpS</i>           | tryptophan--tRNA ligase                                                                   |
| NW338_04410 | 11943 | 12488 | 7175 | 7560 | 5554 | 5375 | 2528 | 4743 | 8782 | 8163 | 5174 | 6786 | 7208 | 4854 | 2834 | 4253        | <i>spxA</i>           | transcriptional regulator SpxA                                                            |
| NW338_04415 | 1072  | 465   | 1032 | 1549 | 661  | 894  | 1923 | 1651 | 1537 | 1564 | 1742 | 1807 | 49   | 836  | 732  | 1013        | <i>mecA</i>           | adaptor protein MecA                                                                      |
| NW338_04420 | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 13          | .                     | competence protein CoiA family protein                                                    |
| NW338_04425 | 79    | 173   | 203  | 221  | 389  | 164  | 210  | 148  | 0    | 54   | 35   | 89   | 91   | 108  | 198  | 89          | <i>pepF</i>           | oligoendopeptidase F                                                                      |
| NW338_04430 | 204   | 134   | 221  | 278  | 31   | 23   | 388  | 88   | 489  | 613  | 1588 | 1387 | 334  | 51   | 329  | 397         | <i>yjbH</i>           | protease adaptor protein YjbH                                                             |
| NW338_04435 | 196   | 209   | 630  | 429  | 105  | 17   | 85   | 110  | 757  | 175  | 114  | 871  | 129  | 392  | 502  | 369         | .                     | truncated hemoglobin Yjbl                                                                 |
| NW338_04440 | 699   | 182   | 269  | 222  | 448  | 230  | 35   | 165  | 378  | 423  | 753  | 991  | 921  | 776  | 1050 | 409         | .                     | CYTH domain-containing protein                                                            |
| NW338_04445 | 82    | 0     | 56   | 240  | 72   | 114  | 89   | 213  | 0    | 261  | 0    | 145  | 0    | 78   | 0    | 88          | .                     | hypothetical protein                                                                      |
| NW338_04450 | 0     | 90    | 229  | 135  | 205  | 167  | 231  | 0    | 128  | 0    | 118  | 260  | 189  | 411  | 172  | .           | .                     | GTP pyrophosphokinase family protein                                                      |
| NW338_04455 | 288   | 126   | 321  | 284  | 206  | 352  | 300  | 464  | 140  | 40   | 158  | 130  | 269  | 819  | 537  | 396         | .                     | NAD kinase                                                                                |
| NW338_04460 | 0     | 0     | 30   | 62   | 0    | 95   | 48   | 11   | 199  | 258  | 295  | 375  | 0    | 76   | 108  | 0           | .                     | RluA family pseudouridine synthase                                                        |
| NW338_04465 | 54    | 58    | 42   | 156  | 104  | 91   | 158  | 156  | 0    | 0    | 73   | 237  | 10   | 66   | 83   | <i>mgfE</i> | magnesium transporter |                                                                                           |
| NW338_04470 | 31    | 150   | 47   | 246  | 238  | 113  | 80   | 216  | 61   | 17   | 69   | 13   | 188  | 107  | 249  | 240         | .                     | monovalent cation:proton antiporter family protein                                        |
| NW338_04475 | 320   | 91    | 321  | 329  | 326  | 499  | 364  | 591  | 136  | 126  | 334  | 396  | 205  | 208  | 220  | 435         | <i>fabI</i>           | enoyl-ACP reductase FabI                                                                  |
| NW338_04480 | 125   | 129   | 98   | 147  | 120  | 130  | 9    | 113  | 208  | 316  | 99   | 136  | 270  | 521  | 0    | 255         | <i>cozEa</i>          | cell elongation protein CozEa                                                             |
| NW338_04485 | 0     | 16    | 97   | 83   | 0    | 4    | 33   | 121  | 0    | 0    | 0    | 32   | 45   | 41   | 0    | 19          | .                     | alanine:cation symporter family protein                                                   |
| NW338_04490 | 0     | 0     | 0    | 15   | 0    | 16   | 107  | 54   | 0    | 21   | 55   | 32   | 62   | 0    | 0    | 47          | .                     | esterase family protein                                                                   |
| NW338_04495 | 629   | 1030  | 407  | 802  | 1921 | 1794 | 884  | 919  | 1674 | 1321 | 1802 | 1483 | 1570 | 1594 | 1042 | 1012        | .                     | YjCG family protein                                                                       |
| NW338_04500 | 0     | 37    | 147  | 198  | 32   | 31   | 43   | 189  | 335  | 212  | 267  | 177  | 99   | 201  | 146  | 202         | .                     | MFS transporter                                                                           |
| NW338_04505 | 88    | 106   | 165  | 119  | 118  | 254  | 35   | 144  | 195  | 41   | 89   | 255  | 94   | 46   | 0    | 122         | .                     | diglucosyl diacylglycerol synthase                                                        |
| NW338_04510 | 38    | 75    | 120  | 67   | 110  | 204  | 258  | 172  | 146  | 22   | 30   | 50   | 154  | 177  | 117  | 167         | .                     | UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--L- lysine ligase                               |
| NW338_04515 | 0     | 0     | 99   | 44   | 96   | 230  | 271  | 149  | 0    | 61   | 0    | 0    | 582  | 0    | 0    | 192         | .                     | YueH family protein                                                                       |
| NW338_04520 | 123   | 77    | 154  | 110  | 284  | 212  | 353  | 191  | 0    | 0    | 27   | 72   | 129  | 41   | 59   | 45          | .                     | peptide chain release factor 3                                                            |
| NW338_04525 | 107   | 337   | 334  | 336  | 686  | 506  | 550  | 672  | 420  | 504  | 421  | 419  | 250  | 263  | 325  | 209         | .                     | TerC family protein                                                                       |
| NW338_04530 | 40    | 12    | 13   | 34   | 58   | 14   | 13   | 22   | 0    | 0    | 0    | 0    | 0    | 6    | 0    | 8           | .                     | trypsin-like peptidase domain-containing protein                                          |
| NW338_04535 | 116   | 54    | 62   | 80   | 185  | 191  | 234  | 166  | 0    | 170  | 189  | 95   | 434  | 320  | 822  | 316         | .                     | TrkH family potassium uptake protein                                                      |
| NW338_04540 | 59    | 32    | 37   | 57   | 86   | 70   | 7    | 73   | 114  | 11   | 97   | 0    | 0    | 43   | 61   | 97          | .                     | bifunctional metallophosphatase/5'-nucleotidase                                           |
| NW338_04555 | 0     | 0     | 34   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | .                     | competence protein ComK                                                                   |
| NW338_04560 | 2171  | 1412  | 1243 | 2346 | 1402 | 1698 | 1211 | 1496 | 6691 | 6250 | 3530 | 3614 | 6397 | 7806 | 1567 | 5444        | .                     | IDEAL domain-containing protein                                                           |
| NW338_04565 | 29    | 55    | 39   | 110  | 115  | 129  | 129  | 123  | 182  | 115  | 149  | 207  | 191  | 80   | 271  | 191         | .                     | lipote--protein ligase                                                                    |
| NW338_04570 | 244   | 54    | 313  | 1249 | 649  | 796  | 175  | 460  | 0    | 0    | 487  | 276  | 829  | 290  | 0    | 474         | .                     | YkvS family protein                                                                       |
| NW338_04575 | 47    | 16    | 81   | 128  | 83   | 146  | 103  | 152  | 584  | 135  | 460  | 660  | 690  | 68   | 561  | 418         | .                     | CPBP family glutamic-type intramembrane protease                                          |
| NW338_04620 | 0     | 0     | 0    | 149  | 107  | 0    | 298  | 26   | 170  | 633  | 791  | 914  | 132  | 0    | 0    | 85          | .                     | DoxX family protein                                                                       |
| NW338_04625 | 0     | 69    | 0    | 0    | 26   | 0    | 0    | 25   | 0    | 0    | 0    | 0    | 0    | 28   | 0    | 37          | .                     | Fe(3+) dicitrate ABC transporter substrate-binding protein                                |
| NW338_04635 | 132   | 118   | 209  | 87   | 0    | 29   | 96   | 0    | 0    | 74   | 205  | 0    | 0    | 0    | 0    | 0           | .                     | TM2 domain-containing protein                                                             |
| NW338_04645 | 30    | 44    | 52   | 131  | 67   | 113  | 163  | 100  | 127  | 53   | 585  | 703  | 427  | 105  | 437  | 358         | .                     | 1,4-dihydroxy-2-naphthoate polyprenyltransferase                                          |
| NW338_04655 | 22    | 55    | 63   | 139  | 0    | 48   | 82   | 55   | 0    | 36   | 112  | 36   | 82   | 20   | 124  | 86          | .                     | isochorismate synthase MenF                                                               |
| NW338_04660 | 96    | 181   | 223  | 154  | 93   | 205  | 222  | 208  | 31   | 0    | 152  | 0    | 161  | 69   | 0    | 112         | <i>menD</i>           | 2-succinyl-5-enolpyruvyl-6-hydroxy-3- cyclohexene-1- carboxylic-acid synthase             |
| NW338_04665 | 71    | 210   | 266  | 292  | 141  | 89   | 197  | 183  | 0    | 0    | 79   | 140  | 0    | 34   | 114  | 130         | <i>menH</i>           | 2-succinyl-6-hydroxy-2; 4-cyclohexadiene-1-carboxylate synthase                           |
| NW338_04670 | 961   | 1095  | 1113 | 1465 | 1028 | 718  | 1722 | 1318 | 1250 | 1389 | 568  | 759  | 1265 | 1667 | 1182 | 1547        | <i>menB</i>           | 1,4-dihydroxy-2-naphthoyl-CoA synthase                                                    |
| NW338_04675 | 86    | 164   | 0    | 0    | 0    | 0    | 183  | 0    | 0    | 275  | 0    | 0    | 0    | 0    | 0    | 108         | <i>sspC</i>           | staphostatin B                                                                            |
| NW338_04680 | 96    | 127   | 60   | 80   | 21   | 40   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | <i>sspB</i>           | cysteine protease staphopain B                                                            |
| NW338_04685 | 176   | 183   | 64   | 62   | 50   | 83   | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | <i>sspA</i>           | Glu-specific serine endopeptidase SspA                                                    |
| NW338_04695 | 0     | 0     | 29   | 11   | 0    | 0    | 0    | 0    | 60   | 0    | 85   | 104  | 0    | 158  | 137  | 114         | .                     | acyltransferase family protein                                                            |
| NW338_04700 | 0     | 0     | 0    | 27   | 0    | 0    | 0    | 0    | 0    | 118  | 100  | 0    | 0    | 155  | 438  | 61          | .                     | MarR family transcriptional regulator                                                     |
| NW338_04715 | 0     | 0     | 0    | 117  | 0    | 0    | 0    | 0    | 0    | 74   | 0    | 0    | 82   | 31   | 400  | 59          | .                     | GNAT family N-acetyltransferase                                                           |
| NW338_04720 | 159   | 190   | 186  | 369  | 134  | 378  | 457  | 327  | 125  | 454  | 371  | 605  | 175  | 449  | 555  | 329         | .                     | osmotic stress response protein                                                           |
| NW338_04725 | 213   | 122   | 217  | 225  | 188  | 165  | 240  | 271  | 97   | 87   | 36   | 66   | 88   | 50   | 0    | 333         | .                     | polysisoprenyl-teichoic acid--peptidoglycan teichoic acid transferase                     |
| NW338_04730 | 0     | 8     | 32   | 0    | 21   | 49   | 9    | 17   | 51   | 233  | 428  | 194  | 39   | 57   | 0    | 55          | <i>fntA</i>           | teichoic acid D-Ala esterase FntA                                                         |
| NW338_04735 | 5733  | 4434  | 5523 | 2829 | 3463 | 3891 | 1660 | 2766 | 3471 | 2725 | 2012 | 3033 | 5163 | 844  | 3768 | 4366        | <i>qoxD</i>           | cytochrome aa3 quinol oxidase subunit IV                                                  |
| NW338_04745 | 7034  | 7581  | 6098 | 5706 | 5225 | 5293 | 5287 | 4437 | 2425 | 1777 | 1681 | 1883 | 4387 | 3676 | 4516 | 6031        | <i>qoxB</i>           | cytochrome aa3 quinol oxidase subunit I                                                   |
| NW338_04750 | 8034  | 9856  | 5899 | 6838 | 4688 | 6151 | 3462 | 4086 | 2115 | 1472 | 2147 | 1037 | 5915 | 6159 | 6301 | 7165        | <i>qoxA</i>           | cytochrome aa3 quinol oxidase subunit II                                                  |
| NW338_04760 | 3385  | 3204  | 1607 | 2035 | 2608 | 1726 | 909  | 887  | 8218 | 8052 | 6035 | 3692 | 3276 | 2825 | 2189 | 1564        | .                     | DUF5011 domain-containing protein                                                         |
| NW338_04765 |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |             | .                     | bifunctional methylenetetrahydrofolate                                                    |
| NW338_04765 | 395   | 289   | 203  | 143  | 299  | 106  | 188  | 205  | 446  | 256  | 293  | 270  | 884  | 1069 | 177  | 265         | <i>folD</i>           | dehydrogenase/methylenetetrahydrofolate cyclohydrolase                                    |
| NW338_04770 | 0     | 40    | 0    | 96   | 139  | 13   | 0    | 0    | 0    | 33   | 481  | 50   | 0    | 276  | 0    | 26          | <i>purE</i>           | Fold                                                                                      |
| NW338_04775 | 0     | 8     | 0    | 33   | 0    | 48   | 9    | 0    | 99   | 57   | 247  | 95   | 0    | 292  | 82   | 65          | <i>purK</i>           | 5-(carboxyamino)imidazole ribonucleotide mutase                                           |
| NW338_04780 | 0     | 0     | 27   | 0    | 0    | 153  | 0    | 0    | 86   | 45   | 0    | 277  | 0    | 39   | 247  | 137         | .                     | 5-(carboxyamino)imidazole ribonucleotide synthase                                         |
| NW338_04785 | 0     | 0     | 0    | 0    | 0    | 23   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | <i>purS</i>           | phosphoribosylaminoimidazolesuccinocarboxamide synthase                                   |
| NW338_04790 | 0     | 62    | 38   | 17   | 389  | 109  | 31   | 91   | 0    | 74   | 94   | 156  | 53   | 20   | 0    | 108         | <i>purQ</i>           | phosphoribosylformylglycinamide synthase I                                                |
| NW338_04795 | 76    | 76    | 31   | 46   | 194  | 184  | 79   | 96   | 131  | 226  | 60   | 97   | 254  | 98   | 280  | 132         | <i>purL</i>           | phosphoribosylformylglycinamide synthase subunit PurL                                     |
| NW338_04800 | 19    | 54    | 50   | 64   | 156  | 182  | 143  | 74   | 192  | 152  | 30   | 144  | 191  | 71   | 176  | 120         | <i>purF</i>           | amidophosphoribosyltransferase                                                            |
| NW338_04805 | 83    | 59    | 139  | 120  | 131  | 117  | 50   | 113  | 161  | 206  | 43   | 231  | 0    | 179  | 343  | 161         | <i>purM</i>           | phosphoribosylformylglycinamide cyclo-ligase                                              |
| NW338_04810 | 132   | 62    | 46   | 65   | 119  | 101  | 18   | 37   | 107  | 57   | 230  | 86   | 405  | 538  | 0    | 184         | <i>purN</i>           | phosphoribosylglycinamide formyltransferase                                               |
| NW338_04815 | 148   | 183   | 198  | 108  | 209  | 254  | 319  | 184  | 309  | 134  | 144  | 192  | 286  | 295  | 124  | 306         | <i>purH</i>           | bifunctional phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolase |
| NW338_04820 | 23    | 161   | 71   | 117  | 314  | 189  | 188  | 102  | 417  | 707  | 291  | 90   | 208  | 534  | 139  | 163         | <i>purD</i>           | phosphoribosylamine--glycine ligase                                                       |
| NW338_04830 | 33    | 68    | 123  | 13   | 81   | 105  | 29   | 81   | 84   | 47   | 0    | 53   | 259  | 117  | 142  | 362         | .                     | energy-coupling factor ABC transporter ATP-binding protein                                |
| NW338_04835 | 161   | 17    | 51   | 33   | 0    | 11   | 0    | 0    | 105  | 0    | 73   | 0    | 307  | 47   | 160  | 117         | .                     | ECF transporter S component                                                               |
| NW338_04845 | 179   | 113   | 162  | 131  | 289  | 393  | 90   | 337  | 495  | 410  | 417  | 408  | 714  | 1316 | 1078 | 1141        | .                     | hypothetical protein                                                                      |
| NW338_04850 | 37    | 98    | 80   | 32   | 100  | 92   | 0    | 93   | 0    | 0    | 0    | 69   | 0    | 35   | 0    | 187         | .                     | class I SAM-dependent rRNA methyltransferase                                              |
| NW338_04855 | 699   | 551   | 425  | 420  | 325  | 243  | 802  | 189  | 413  | 148  | 236  | 321  | 457  | 731  |      |             |                       |                                                                                           |

|             |      |      |      |      |      |      |      |      |      |       |       |       |      |      |      |      |             |                                                                 |
|-------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|-------------|-----------------------------------------------------------------|
| NW338_04890 | 470  | 572  | 507  | 943  | 736  | 492  | 841  | 743  | 922  | 778   | 1071  | 1245  | 514  | 503  | 558  | 797  | .           | ribonuclease J                                                  |
| NW338_04895 | 327  | 218  | 1082 | 741  | 859  | 1965 | 660  | 1441 | 1323 | 933   | 1087  | 1267  | 2610 | 2843 | 3225 | 1701 | .           | DNA-dependent RNA polymerase subunit epsilon                    |
| NW338_04905 | 220  | 35   | 53   | 143  | 115  | 204  | 184  | 175  | 0    | 148   | 271   | 417   | 201  | 167  | 307  | 46   | <i>def</i>  | peptide deformylase                                             |
| NW338_04910 | 138  | 56   | 72   | 184  | 61   | 132  | 82   | 81   | 0    | 128   | 137   | 637   | 291  | 43   | 563  | 105  | .           | YkyA family protein                                             |
| NW338_04915 | 2708 | 2753 | 2502 | 3357 | 2363 | 3226 | 2764 | 3177 | 1281 | 723   | 1017  | 891   | 2663 | 3888 | 3362 | 3841 | <i>pdhA</i> | pyruvate dehydrogenase (acetyl-transferring) E1                 |
| NW338_04920 | 2949 | 2801 | 3939 | 3741 | 3649 | 3660 | 3666 | 4655 | 2368 | 1380  | 3718  | 2725  | 7585 | 4427 | 9296 | 4379 | .           | component subunit alpha                                         |
| NW338_04925 | 4364 | 5520 | 5924 | 7109 | 7951 | 8119 | 7765 | 8089 | 2220 | 2057  | 2646  | 2383  | 7419 | 5770 | 8510 | 5329 | .           | alpha-ketoacid dehydrogenase subunit beta                       |
| NW338_04935 | 103  | 35   | 0    | 0    | 0    | 147  | 0    | 144  | 0    | 179   | 0     | 88    | 0    | 0    | 0    | 46   | .           | 2-oxo acid dehydrogenase subunit E2                             |
| NW338_04940 | 0    | 0    | 0    | 0    | 46   | 50   | 38   | 92   | 0    | 59    | 0     | 0     | 0    | 0    | 0    | 0    | .           | UPF0223 family protein                                          |
| NW338_04945 | 0    | 0    | 45   | 13   | 61   | 11   | 97   | 89   | 0    | 0     | 22    | 0     | 0    | 0    | 84   | 16   | .           | XRE family transcriptional regulator                            |
| NW338_04950 | 0    | 20   | 24   | 24   | 0    | 53   | 0    | 12   | 0    | 0     | 0     | 0     | 45   | 81   | 0    | 48   | .           | ABC transporter ATP-binding protein                             |
| NW338_04955 | 57   | 0    | 0    | 0    | 0    | 58   | 0    | 52   | 0    | 0     | 0     | 0     | 44   | 17   | 0    | 47   | .           | ABC transporter permease                                        |
| NW338_04960 | 163  | 104  | 60   | 84   | 223  | 144  | 170  | 145  | 105  | 91    | 222   | 227   | 339  | 187  | 0    | 242  | .           | ABC transporter permease                                        |
| NW338_04965 | 365  | 611  | 398  | 683  | 1002 | 611  | 695  | 928  | 501  | 232   | 226   | 919   | 422  | 456  | 1033 | 551  | .           | spermidine/putrescine ABC transporter substrate-binding protein |
| NW338_04970 | 213  | 235  | 510  | 310  | 210  | 29   | 49   | 149  | 289  | 76    | 0     | 360   | 85   | 65   | 219  | 488  | .           | DUF4064 domain-containing protein                               |
| NW338_04975 | 34   | 101  | 53   | 110  | 57   | 233  | 120  | 167  | 128  | 108   | 394   | 428   | 0    | 109  | 0    | 184  | .           | DUF4064 domain-containing protein                               |
| NW338_04980 | 70   | 228  | 238  | 197  | 143  | 240  | 240  | 331  | 927  | 1169  | 973   | 744   | 58   | 128  | 275  | 157  | .           | Nramp family divalent metal transporter                         |
| NW338_04985 | 917  | 696  | 601  | 610  | 543  | 746  | 301  | 471  | 765  | 539   | 569   | 457   | 1019 | 1460 | 829  | 885  | .           | YktB family protein                                             |
| NW338_04995 | 47   | 96   | 88   | 176  | 339  | 277  | 302  | 401  | 61   | 0     | 0     | 61    | 89   | 105  | 144  | 140  | <i>typA</i> | inositol monophosphatase                                        |
| NW338_05000 | 257  | 227  | 0    | 0    | 446  | 147  | 634  | 315  | 1395 | 1320  | 378   | 0     | 0    | 81   | 0    | 257  | .           | translational GTPase TypA                                       |
| NW338_05005 | 89   | 20   | 101  | 53   | 131  | 80   | 64   | 112  | 0    | 0     | 178   | 50    | 74   | 220  | 0    | 303  | .           | YlaI family protein                                             |
| NW338_05010 | 2189 | 1076 | 3173 | 3559 | 578  | 848  | 792  | 1111 | 1679 | 770   | 1925  | 360   | 4415 | 5878 | 3872 | 6934 | .           | hypothetical protein                                            |
| NW338_05015 | 61   | 109  | 141  | 87   | 279  | 164  | 74   | 156  | 97   | 120   | 174   | 66    | 91   | 142  | 0    | 143  | <i>ftsW</i> | YlaN family protein                                             |
| NW338_05020 | 329  | 337  | 350  | 392  | 354  | 384  | 386  | 422  | 65   | 80    | 55    | 116   | 137  | 156  | 124  | 342  | .           | cell division protein FtsW                                      |
| NW338_05025 | 180  | 105  | 146  | 225  | 183  | 74   | 160  | 146  | 933  | 728   | 164   | 588   | 102  | 251  | 132  | 821  | .           | pyruvate carboxylase                                            |
| NW338_05030 | 180  | 133  | 346  | 372  | 230  | 395  | 360  | 280  | 189  | 53    | 118   | 109   | 491  | 668  | 387  | 621  | <i>cyoE</i> | heme A synthase                                                 |
| NW338_05040 | 100  | 95   | 124  | 120  | 126  | 207  | 272  | 197  | 0    | 0     | 164   | 23    | 317  | 39   | 89   | 59   | .           | heme o synthase                                                 |
| NW338_05045 | 99   | 234  | 390  | 117  | 388  | 132  | 210  | 211  | 0    | 150   | 292   | 116   | 190  | 125  | 0    | 366  | .           | CAP domain-containing protein                                   |
| NW338_05050 | 61   | 28   | 81   | 70   | 0    | 100  | 0    | 30   | 0    | 34    | 45    | 54    | 651  | 527  | 433  | 315  | .           | YlbF family regulator                                           |
| NW338_05055 | 0    | 0    | 0    | 0    | 0    | 80   | 0    | 0    | 231  | 0     | 498   | 0     | 0    | 0    | 361  | 50   | .           | glycerophosphodiester phosphodiesterase                         |
| NW338_05060 | 0    | 0    | 76   | 30   | 0    | 86   | 194  | 24   | 155  | 0     | 0     | 254   | 183  | 0    | 0    | 33   | .           | YlbG family protein                                             |
| NW338_05065 | 85   | 18   | 131  | 89   | 116  | 23   | 0    | 22   | 0    | 30    | 77    | 207   | 0    | 359  | 0    | 171  | <i>rsmD</i> | hypothetical protein                                            |
| NW338_05070 | 118  | 99   | 195  | 110  | 155  | 138  | 21   | 66   | 109  | 133   | 0     | 50    | 195  | 248  | 0    | 89   | <i>coaD</i> | 16S rRNA (guanine(966)-N(2))-methyltransferase RsmD             |
| NW338_05075 | 0    | 14   | 43   | 12   | 66   | 34   | 9    | 77   | 0    | 14    | 78    | 66    | 0    | 53   | 164  | 0    | .           | panetheine-phosphate adenyllyltransferase                       |
| NW338_05080 | 238  | 336  | 635  | 645  | 1150 | 794  | 1381 | 1013 | 499  | 232   | 418   | 390   | 881  | 540  | 1085 | 699  | .           | nucleotidyltransferase                                          |
| NW338_05085 | 1006 | 696  | 917  | 692  | 0    | 192  | 900  | 169  | 6590 | 6037  | 3892  | 788   | 2130 | 1919 | 2997 | 1966 | <i>rpmF</i> | DUF177 domain-containing protein                                |
| NW338_05090 | 0    | 8    | 0    | 0    | 20   | 0    | 0    | 11   | 0    | 0     | 0     | 26    | 0    | 0    | 0    | 9    | <i>isdB</i> | 50S ribosomal protein L32                                       |
| NW338_05095 | 27   | 18   | 0    | 13   | 60   | 25   | 10   | 0    | 0    | 0     | 60    | 0     | 0    | 0    | 0    | 16   | <i>isdA</i> | heme uptake protein IsdB                                        |
| NW338_05100 | 0    | 0    | 0    | 17   | 0    | 9    | 0    | 14   | 0    | 0     | 0     | 82    | 0    | 0    | 0    | 0    | <i>isdC</i> | LPXTG-anchored heme-scavenging protein IsdA                     |
| NW338_05105 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 59    | 0     | 0    | 0    | 0    | 0    | <i>isdD</i> | heme uptake protein IsdC                                        |
| NW338_05110 | 49   | 0    | 51   | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 40   | 0    | 0    | 0    | <i>isdE</i> | iron-regulated surface determinant protein IsdD                 |
| NW338_05115 | 0    | 0    | 0    | 0    | 0    | 6    | 78   | 12   | 0    | 0     | 0     | 25    | 0    | 0    | 0    | 13   | <i>isdF</i> | heme ABC transporter substrate-binding protein IsdE             |
| NW338_05120 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 70   | 0    | .           | hemin ABC transporter permease protein IsdF                     |
| NW338_05125 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | <i>srtB</i> | class B sortase                                                 |
| NW338_05135 | 77   | 21   | 127  | 50   | 52   | 214  | 0    | 38   | 0    | 67    | 0     | 76    | 96   | 18   | 0    | 172  | .           | staphylobilin-forming heme oxygenase IsdG                       |
| NW338_05140 | 68   | 142  | 172  | 77   | 290  | 228  | 253  | 104  | 0    | 30    | 0     | 0     | 34   | 26   | 0    | 144  | <i>pheS</i> | RNA methyltransferase                                           |
| NW338_05145 | 165  | 190  | 126  | 124  | 273  | 429  | 485  | 305  | 49   | 68    | 44    | 52    | 158  | 23   | 38   | 142  | <i>pheT</i> | phenylalanine--tRNA ligase subunit alpha                        |
| NW338_05150 | 0    | 10   | 21   | 0    | 67   | 0    | 0    | 10   | 63   | 157   | 0     | 0     | 0    | 73   | 0    | 0    | <i>rnhC</i> | phenylalanine--tRNA ligase subunit beta                         |
| NW338_05155 | 110  | 0    | 114  | 72   | 94   | 99   | 0    | 220  | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 0    | <i>zapA</i> | ribonuclease HIII                                               |
| NW338_05160 | 0    | 73   | 180  | 143  | 48   | 0    | 0    | 38   | 326  | 433   | 522   | 923   | 0    | 104  | 0    | 73   | .           | cell division protein ZapA                                      |
| NW338_05165 | 121  | 65   | 188  | 179  | 54   | 35   | 110  | 164  | 0    | 0     | 50    | 131   | 0    | 8    | 0    | 75   | <i>polX</i> | CvpA family protein                                             |
| NW338_05170 | 64   | 41   | 88   | 94   | 54   | 99   | 70   | 163  | 22   | 21    | 19    | 69    | 98   | 108  | 185  | 68   | .           | DNA polymerase/3'-5' exonuclease PolX                           |
| NW338_05175 | 5731 | 3791 | 6827 | 5658 | 3109 | 3334 | 4048 | 3537 | 4377 | 3907  | 6261  | 7204  | 2461 | 2401 | 1950 | 2722 | <i>trxA</i> | endonuclease MutS2                                              |
| NW338_05185 | 82   | 36   | 212  | 178  | 52   | 30   | 219  | 213  | 59   | 9     | 132   | 146   | 0    | 135  | 0    | 52   | <i>uvrC</i> | thioredoxin                                                     |
| NW338_05190 | 499  | 372  | 495  | 408  | 206  | 238  | 288  | 186  | 461  | 239   | 140   | 201   | 727  | 572  | 983  | 535  | .           | excinuclease ABC subunit UvrC                                   |
| NW338_05195 | 1674 | 2342 | 1423 | 1468 | 959  | 1006 | 788  | 1096 | 356  | 299   | 282   | 318   | 1840 | 1851 | 1638 | 1491 | <i>sdhA</i> | succinate dehydrogenase cytochrome b558 subunit                 |
| NW338_05200 | 2899 | 2678 | 1254 | 1938 | 753  | 605  | 1209 | 1142 | 1115 | 946   | 660   | 503   | 1498 | 1185 | 1481 | 1517 | <i>sdhB</i> | succinate dehydrogenase flavoprotein subunit                    |
| NW338_05205 | 71   | 76   | 389  | 447  | 175  | 275  | 539  | 425  | 73   | 82    | 163   | 272   | 103  | 265  | 1093 | 448  | <i>racE</i> | succinate dehydrogenase iron-sulfur subunit                     |
| NW338_05210 | 206  | 76   | 314  | 772  | 65   | 251  | 243  | 397  | 0    | 84    | 151   | 96    | 182  | 273  | 288  | 138  | .           | glutamate racemase                                              |
| NW338_05215 | 86   | 158  | 205  | 381  | 99   | 205  | 61   | 204  | 117  | 180   | 0     | 245   | 220  | 0    | 701  | 134  | .           | XTP/dITP diphosphatase                                          |
| NW338_05225 | 217  | 29   | 78   | 683  | 494  | 328  | 568  | 807  | 7974 | 10356 | 16339 | 16858 | 3877 | 4226 | 3236 | 4866 | <i>ecb</i>  | metallophosphoesterase                                          |
| NW338_05235 | 0    | 0    | 49   | 29   | 0    | 0    | 25   | 0    | 0    | 0     | 0     | 59    | 510  | 364  | 0    | 127  | .           | complement convertase inhibitor Ecb                             |
| NW338_05240 | 0    | 38   | 0    | 23   | 0    | 0    | 0    | 37   | 343  | 0     | 512   | 148   | 312  | 420  | 0    | 143  | .           | formyl peptide receptor-like 1 inhibitory protein               |
| NW338_05245 | 0    | 0    | 39   | 23   | 0    | 0    | 0    | 118  | 105  | 32    | 0     | 113   | 4289 | 6231 | 1553 | 3092 | <i>efb</i>  | hypothetical protein                                            |
| NW338_05250 | 0    | 0    | 0    | 66   | 109  | 0    | 0    | 138  | 168  | 91    | 119   | 139   | 3241 | 2066 | 5935 | 844  | <i>scb</i>  | complement convertase inhibitor Efb                             |
| NW338_05255 | 0    | 0    | 0    | 0    | 134  | 0    | 462  | 0    | 316  | 86    | 688   | 0     | 253  | 1785 | 0    | 554  | .           | complement inhibitor SCIN-B                                     |
| NW338_05260 | 396  | 41   | 363  | 248  | 394  | 0    | 44   | 81   | 0    | 0     | 537   | 208   | 931  | 626  | 0    | 680  | .           | hypothetical protein                                            |
| NW338_05265 | 1818 | 1632 | 1103 | 1169 | 677  | 520  | 438  | 439  | 596  | 521   | 778   | 859   | 1927 | 1707 | 865  | 766  | <i>hyl</i>  | hypothetical protein                                            |
| NW338_05275 | 0    | 0    | 0    | 0    | 477  | 285  | 1194 | 464  | 762  | 1863  | 751   | 764   | 180  | 206  | 0    | 90   | .           | alpha-hemolysin                                                 |
| NW338_05290 | 0    | 0    | 0    | 0    | 34   | 29   | 0    | 0    | 0    | 0     | 0     | 0     | 0    | 0    | 0    | 17   | .           | hypothetical protein                                            |
| NW338_05295 | 276  | 340  | 155  | 344  | 67   | 176  | 171  | 48   | 164  | 140   | 302   | 131   | 35   | 0    | 169  | 13   | <i>argF</i> | superantigen-like protein SSL14                                 |
| NW338_05300 | 536  | 286  | 112  | 92   | 393  | 257  | 297  | 170  | 56   | 122   | 413   | 261   | 0    | 73   | 0    | 14   | <i>arcC</i> | ornithine carbamoyltransferase                                  |
| NW338_05305 | 85   | 204  | 120  | 127  | 16   | 32   | 39   | 26   | 77   | 94    | 251   | 147   | 0    | 33   | 0    | 8    | .           | carbamate kinase                                                |
| NW338_05310 | 0    | 126  | 113  | 162  | 0    | 27   | 45   | 0    | 0    | 0     | 0     | 0     | 363  | 119  | 0    | 401  | .           | YfCC family protein                                             |
| NW338_05315 | 0    | 0    | 31   | 29   | 150  | 72   | 0    | 25   | 194  | 217   | 527   | 429   | 117  | 140  | 0    | 105  | .           | hypothetical protein                                            |
| NW338_05320 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 123   | 0    | 72   | 0    | 161  | .           | TDI family transporter                                          |
| NW338_05330 | 8270 | 7649 | 5474 | 6677 | 499  | 774  | 636  | 140  | 3326 | 3316  | 9351  | 3850  | 0    | 0    | 0    | 0    | .           | DNA-binding protein                                             |
| NW338_05340 | 133  | 187  | 0    | 36   | 419  | 440  | 247  | 292  | 87   | 94    | 550   | 329   | 52   | 40   | 134  | 365  | .           | beta-class phenol-soluble modulin                               |
| NW338_05345 | 259  | 210  | 213  | 368  | 87   | 370  | 94   | 257  | 3231 |       |       |       |      |      |      |      |             |                                                                 |

|             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |              |                                                          |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|----------------------------------------------------------|
| NW338_05415 | 148   | 66    | 168   | 271   | 317   | 182   | 355   | 452   | 1717  | 2884  | 1830  | 445   | 323   | 270   | 898   | 625   | .            | YggT family protein                                      |
| NW338_05420 | 0     | 106   | 251   | 63    | 244   | 69    | 203   | 191   | 75    | 0     | 57    | 0     | 102   | 17    | 0     | 66    | .            | RNA-binding protein                                      |
| NW338_05425 | 399   | 108   | 516   | 204   | 416   | 362   | 837   | 490   | 288   | 233   | 493   | 339   | 505   | 281   | 571   | 364   | .            | DivIVA domain-containing protein                         |
| NW338_05430 | 171   | 155   | 243   | 206   | 302   | 292   | 335   | 375   | 38    | 65    | 46    | 27    | 85    | 67    | 210   | 129   | <i>ileS</i>  | isoleucine--tRNA ligase                                  |
| NW338_05435 | 58    | 0     | 37    | 49    | 84    | 33    | 52    | 50    | 66    | 0     | 52    | 30    | 45    | 98    | 0     | 115   | .            | VOC family protein                                       |
| NW338_05445 | 174   | 0     | 39    | 113   | 0     | 25    | 21    | 19    | 0     | 0     | 0     | 49    | 0     | 55    | 0     | 88    | <i>lspA</i>  | signal peptidase II                                      |
| NW338_05450 | 62    | 59    | 0     | 61    | 73    | 144   | 22    | 72    | 57    | 35    | 0     | 0     | 116   | 0     | 100   | 66    | .            | RluA family pseudouridine synthase                       |
| NW338_05455 | 230   | 60    | 86    | 36    | 47    | 219   | 277   | 38    | 99    | 154   | 725   | 199   | 556   | 180   | 0     | 212   | <i>pyrR</i>  | bifunctional pyr operon transcriptional regulator/uracil |
| NW338_05460 | 55    | 12    | 20    | 34    | 81    | 59    | 32    | 57    | 131   | 187   | 66    | 82    | 90    | 102   | 336   | 91    | .            | phosphoribosyltransferase PyrR                           |
| NW338_05465 | 0     | 0     | 0     | 16    | 28    | 38    | 70    | 61    | 60    | 73    | 217   | 297   | 273   | 287   | 406   | 294   | .            | NCs2 family nucleobase:cation symporter                  |
| NW338_05470 | 34    | 65    | 54    | 35    | 20    | 126   | 57    | 33    | 41    | 13    | 33    | 82    | 93    | 64    | 204   | 329   | .            | aspartate carbamoyltransferase catalytic subunit         |
| NW338_05475 | 26    | 17    | 47    | 40    | 0     | 113   | 184   | 116   | 307   | 306   | 98    | 472   | 695   | 1520  | 725   | 565   | .            | dihydroorotase                                           |
| NW338_05480 | 96    | 28    | 105   | 94    | 49    | 146   | 111   | 238   | 70    | 87    | 55    | 263   | 202   | 226   | 140   | 295   | <i>carB</i>  | carbamoyl phosphate synthase small subunit               |
| NW338_05485 | 41    | 60    | 0     | 57    | 97    | 18    | 161   | 104   | 239   | 69    | 245   | 81    | 296   | 207   | 0     | 132   | <i>pyrF</i>  | carbamoyl-phosphate synthase large subunit               |
| NW338_05490 | 47    | 16    | 95    | 0     | 82    | 307   | 208   | 119   | 380   | 81    | 0     | 502   | 510   | 670   | 284   | 324   | <i>pyrE</i>  | orotidine-5'-phosphate decarboxylase                     |
| NW338_05495 | 352   | 0     | 0     | 0     | 0     | 182   | 48    | 93    | 853   | 226   | 596   | 995   | 522   | 128   | 0     | 825   | .            | orotate phosphoribosyltransferase                        |
| NW338_05500 | 107   | 166   | 112   | 104   | 420   | 381   | 103   | 132   | 281   | 0     | 104   | 326   | 117   | 34    | 853   | 95    | .            | hypothetical protein                                     |
| NW338_05505 | 44    | 52    | 67    | 163   | 52    | 53    | 137   | 78    | 0     | 120   | 228   | 148   | 330   | 384   | 256   | 351   | .            | VOC family protein                                       |
| NW338_05510 | 115   | 138   | 344   | 152   | 716   | 585   | 1039  | 462   | 265   | 51    | 71    | 0     | 132   | 257   | 442   | 322   | <i>gmK</i>   | NFACT family protein                                     |
| NW338_05515 | 212   | 683   | 577   | 509   | 1246  | 643   | 94    | 581   | 0     | 781   | 0     | 0     | 0     | 0     | 773   | 81    | <i>rpoZ</i>  | guanylate kinase                                         |
| NW338_05520 | 0     | 69    | 154   | 175   | 119   | 96    | 460   | 372   | 101   | 89    | 37    | 89    | 122   | 65    | 0     | 164   | <i>coaBC</i> | DNA-directed RNA polymerase subunit omega                |
| NW338_05525 | 193   | 144   | 245   | 161   | 112   | 101   | 159   | 155   | 148   | 20    | 117   | 75    | 392   | 174   | 258   | 86    | <i>priA</i>  | bifunctional phosphopantothenoylcysteine                 |
| NW338_05535 | 352   | 501   | 474   | 581   | 828   | 400   | 152   | 248   | 7157  | 8888  | 6699  | 7949  | 1205  | 3907  | 1543  | 3009  | .            | decarboxylase/phosphopantothenate--cysteine ligase       |
| NW338_05540 | 0     | 0     | 0     | 151   | 129   | 25    | 0     | 24    | 0     | 33    | 0     | 0     | 0     | 0     | 0     | 0     | .            | CoaBC                                                    |
| NW338_05545 | 61    | 44    | 291   | 188   | 113   | 108   | 44    | 112   | 189   | 0     | 45    | 26    | 164   | 84    | 0     | 118   | <i>fmt</i>   | primosomal protein N'                                    |
| NW338_05550 | 0     | 88    | 139   | 81    | 38    | 139   | 204   | 68    | 0     | 37    | 146   | 196   | 171   | 70    | 270   | 186   | <i>rsmB</i>  | TM2 domain-containing protein                            |
| NW338_05555 | 131   | 58    | 187   | 186   | 204   | 169   | 19    | 126   | 0     | 0     | 0     | 97    | 161   | 25    | 313   | 155   | <i>rlmN</i>  | peptide deformylase                                      |
| NW338_05560 | 96    | 90    | 79    | 106   | 136   | 97    | 14    | 39    | 71    | 244   | 0     | 33    | 0     | 156   | 0     | 65    | .            | methionyl-tRNA formyltransferase                         |
| NW338_05565 | 237   | 129   | 172   | 140   | 227   | 153   | 185   | 147   | 533   | 489   | 96    | 293   | 91    | 174   | 92    | 141   | <i>pknB</i>  | 16S rRNA (cytosine(967)-C(5))-methyltransferase RsmB     |
| NW338_05570 | 49    | 29    | 96    | 111   | 134   | 215   | 104   | 108   | 0     | 0     | 143   | 64    | 54    | 148   | 198   | 49    | <i>rsgA</i>  | 23S rRNA (adenine(2503)-C(2))-methyltransferase RlmN     |
| NW338_05575 | 67    | 193   | 186   | 61    | 280   | 93    | 96    | 199   | 0     | 0     | 98    | 0     | 0     | 122   | 0     | 39    | <i>rpe</i>   | protein-serine/threonine phosphatase Stp1                |
| NW338_05580 | 44    | 99    | 86    | 177   | 39    | 133   | 126   | 145   | 0     | 77    | 130   | 193   | 0     | 42    | 414   | 220   | .            | serine/threonine protein kinase Stp1                     |
| NW338_05585 | 35128 | 37549 | 45952 | 30633 | 34186 | 20752 | 26735 | 20313 | 16025 | 21189 | 13784 | 15192 | 11820 | 14172 | 19109 | 24444 | <i>rpmB</i>  | ribosome small subunit-dependent GTPase A                |
| NW338_05590 | 76    | 0     | 268   | 223   | 169   | 162   | 532   | 509   | 0     | 0     | 0     | 870   | 517   | 145   | 451   | 370   | .            | ribulose-phosphate 3-epimerase                           |
| NW338_05595 | 26    | 114   | 181   | 213   | 204   | 216   | 452   | 252   | 71    | 129   | 81    | 190   | 332   | 272   | 0     | 277   | <i>fokA</i>  | thiamine diphosphokinase                                 |
| NW338_05600 | 35    | 88    | 192   | 211   | 84    | 102   | 223   | 192   | 25    | 0     | 21    | 39    | 131   | 123   | 0     | 77    | <i>recG</i>  | 50S ribosomal protein L28                                |
| NW338_05605 | 330   | 183   | 135   | 434   | 345   | 269   | 276   | 157   | 0     | 86    | 77    | 0     | 64    | 1079  | 0     | 333   | <i>fapR</i>  | Asp23/Gls24 family envelope stress response protein      |
| NW338_05610 | 334   | 145   | 397   | 303   | 0     | 123   | 242   | 239   | 53    | 32    | 0     | 159   | 185   | 55    | 171   | 122   | <i>plsX</i>  | fatty acid kinase catalytic subunit FokA                 |
| NW338_05615 | 154   | 272   | 314   | 496   | 396   | 236   | 225   | 315   | 63    | 71    | 45    | 61    | 349   | 424   | 558   | 437   | <i>fobD</i>  | ATP-dependent DNA helicase RecG                          |
| NW338_05620 | 819   | 693   | 1223  | 821   | 1005  | 848   | 1393  | 1242  | 1272  | 525   | 378   | 795   | 2836  | 3382  | 2366  | 3112  | <i>fobG</i>  | transcription factor FapR                                |
| NW338_05625 | 7179  | 7818  | 8443  | 8325  | 17382 | 9265  | 19050 | 12611 | 3206  | 4425  | 4143  | 4007  | 4628  | 3564  | 4422  | 5270  | .            | phosphate acyltransferase PlsX                           |
| NW338_05630 | 0     | 96    | 62    | 64    | 86    | 134   | 28    | 137   | 0     | 89    | 57    | 0     | 298   | 126   | 126   | 214   | <i>rnc</i>   | ACP 5-malonyltransferase                                 |
| NW338_05635 | 26    | 81    | 51    | 67    | 35    | 76    | 68    | 23    | 66    | 46    | 114   | 102   | 23    | 30    | 0     | 57    | <i>smc</i>   | 3-oxoacyl-[acyl-carrier-protein] reductase               |
| NW338_05640 | 97    | 224   | 289   | 139   | 81    | 266   | 293   | 138   | 0     | 13    | 71    | 0     | 0     | 0     | 0     | 78    | <i>ftsY</i>  | acyl carrier protein                                     |
| NW338_05645 | 0     | 0     | 89    | 167   | 277   | 61    | 62    | 99    | 0     | 0     | 0     | 0     | 0     | 319   | 0     | 0     | .            | ribonuclease III                                         |
| NW338_05650 | 458   | 443   | 474   | 785   | 504   | 520   | 1220  | 1253  | 346   | 208   | 171   | 71    | 599   | 319   | 258   | 520   | <i>ffh</i>   | chromosome segregation protein SMC                       |
| NW338_05655 | 271   | 346   | 341   | 285   | 1037  | 432   | 112   | 606   | 0     | 0     | 160   | 0     | 300   | 284   | 0     | 526   | <i>rpsP</i>  | signal recognition particle-docking protein FtsY         |
| NW338_05660 | 0     | 0     | 0     | 0     | 50    | 53    | 239   | 145   | 0     | 212   | 0     | 0     | 0     | 0     | 0     | 0     | <i>rimM</i>  | putative DNA-binding protein                             |
| NW338_05665 | 39    | 35    | 66    | 78    | 34    | 82    | 70    | 161   | 71    | 22    | 0     | 153   | 48    | 144   | 0     | 17    | <i>trmD</i>  | signal recognition particle protein                      |
| NW338_05670 | 1211  | 1461  | 2266  | 2259  | 2059  | 2154  | 1937  | 2847  | 2945  | 2650  | 2134  | 1521  | 4880  | 4946  | 6018  | 4058  | <i>rplS</i>  | 30S ribosomal protein S16                                |
| NW338_05675 | 17    | 18    | 17    | 5     | 26    | 39    | 4     | 19    | 23    | 12    | 41    | 19    | 38    | 48    | 137   | 91    | <i>yfhO</i>  | ribosome maturation factor RimM                          |
| NW338_05680 | 32    | 0     | 33    | 16    | 239   | 30    | 12    | 62    | 0     | 0     | 0     | 28    | 0     | 178   | 0     | 0     | <i>ylqF</i>  | tRNA (guanosine(37)-N1)-methyltransferase TrmD           |
| NW338_05685 | 0     | 12    | 169   | 70    | 137   | 8     | 105   | 156   | 0     | 0     | 54    | 32    | 0     | 0     | 0     | 0     | .            | 50S ribosomal protein L19                                |
| NW338_05690 | 202   | 499   | 1235  | 684   | 816   | 641   | 819   | 708   | 248   | 331   | 422   | 557   | 652   | 545   | 373   | 862   | <i>sucC</i>  | lipoteichoic acid-specific glycosyltransferase YfhO      |
| NW338_05695 | 1607  | 1094  | 1620  | 1358  | 1591  | 1475  | 2064  | 1668  | 999   | 684   | 1056  | 639   | 912   | 733   | 202   | 1327  | <i>sucD</i>  | ribosome biogenesis GTPase YlqF                          |
| NW338_05710 | 0     | 0     | 0     | 13    | 0     | 0     | 0     | 13    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | <i>dprA</i>  | ribonuclease HII                                         |
| NW338_05715 | 64    | 124   | 111   | 148   | 154   | 167   | 220   | 174   | 0     | 15    | 184   | 75    | 170   | 100   | 126   | 91    | <i>topA</i>  | ADP-forming succinate--CoA ligase subunit beta           |
| NW338_05720 | 112   | 112   | 154   | 227   | 244   | 234   | 422   | 368   | 46    | 111   | 81    | 43    | 157   | 384   | 270   | 247   | <i>trmFO</i> | succinate--CoA ligase subunit alpha                      |
| NW338_05730 | 516   | 286   | 683   | 979   | 623   | 628   | 756   | 798   | 207   | 0     | 81    | 137   | 485   | 594   | 505   | 489   | <i>hslV</i>  | DNA-processing protein DprA                              |
| NW338_05735 | 354   | 277   | 214   | 401   | 131   | 278   | 217   | 308   | 322   | 249   | 217   | 169   | 298   | 314   | 496   | 274   | <i>hslU</i>  | type I DNA topoisomerase                                 |
| NW338_05740 | 264   | 448   | 477   | 678   | 394   | 374   | 616   | 592   | 438   | 252   | 413   | 477   | 328   | 847   | 462   | 953   | <i>codY</i>  | methylenetetrahydrofolate--tRNA-(uracil(54)- C(5))-      |
| NW338_05750 | 3634  | 2400  | 4063  | 2288  | 4212  | 5198  | 3730  | 3221  | 1385  | 1651  | 1639  | 2567  | 17343 | 12749 | 22841 | 3437  | <i>rpsB</i>  | methyltransferase (FADH(2)-oxidizing) TrmFO              |
| NW338_05760 | 2408  | 2092  | 2982  | 2629  | 2423  | 2101  | 4311  | 3124  | 1672  | 1679  | 1127  | 1878  | 2647  | 2482  | 4783  | 2207  | <i>tsf</i>   | ATP-dependent protease subunit HslV                      |
| NW338_05765 | 327   | 264   | 399   | 279   | 818   | 373   | 407   | 210   | 84    | 0     | 265   | 0     | 65    | 56    | 234   | 169   | <i>pyrH</i>  | ATP-dependent protease ATPase subunit HslU               |
| NW338_05770 | 450   | 700   | 279   | 426   | 817   | 1288  | 698   | 631   | 413   | 116   | 491   | 132   | 192   | 999   | 940   | 474   | <i>frf</i>   | GTP-sensing pleiotropic transcriptional regulator CodY   |
| NW338_05775 | 60    | 62    | 59    | 154   | 0     | 27    | 92    | 50    | 0     | 0     | 54    | 0     | 0     | 53    | 339   | 49    | .            | 30S ribosomal protein S2                                 |
| NW338_05780 | 36    | 81    | 107   | 59    | 0     | 96    | 209   | 39    | 222   | 104   | 134   | 72    | 142   | 17    | 0     | 197   | .            | translation elongation factor Ts                         |
| NW338_05785 | 0     | 126   | 116   | 176   | 98    | 177   | 369   | 148   | 86    | 0     | 84    | 157   | 37    | 40    | 71    | 176   | <i>rseP</i>  | UMP kinase                                               |
| NW338_05790 | 193   | 196   | 198   | 362   | 375   | 289   | 529   | 512   | 96    | 85    | 152   | 217   | 246   | 419   | 102   | 263   | .            | ribosome recycling factor                                |
| NW338_05795 | 139   | 123   | 215   | 171   | 147   | 114   | 138   | 234   | 64    | 25    | 10    | 90    | 68    | 82    | 21    | 68    | .            | isoprenyl transferase                                    |
| NW338_05800 | 313   | 469   | 978   | 614   | 599   | 273   | 735   | 597   | 0     | 68    | 95    | 104   | 0     | 256   | 0     | 212   | <i>rimP</i>  | phosphatidate cytidyltransferase                         |
| NW338_05805 | 249   | 230   | 391   | 355   | 219   | 267   | 612   | 565   | 51    | 0     | 109   | 69    | 155   | 338   | 148   | 150   | <i>nusA</i>  | RIP metalloprotease RseP                                 |
| NW338_05810 | 655   | 1028  | 657   | 1155  | 88    | 130   | 658   | 398   | 0     | 0     | 0     | 0     | 933   | 568   | 0     | 729   | .            | proline--tRNA ligase                                     |
| NW338_05815 | 282   | 280   | 450   | 265   | 157   | 122   | 465   | 67    | 0     | 0     | 0     | 0     | 0     | 85    | 0     | 388   | .            | DNA polymerase III subunit alpha                         |
| NW338_05820 | 409   | 548   | 647   | 815   | 535   | 413   | 729   | 771   | 109   | 233   | 80    | 123   | 361   | 260   | 651   | 279   | <i>infB</i>  | ribosome maturation factor RimP                          |
| NW338_05825 | 162   | 263   | 287   | 438   | 71    | 257   | 231   | 376   | 807</ |       |       |       |       |       |       |       |              |                                                          |

|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |              |                                                                       |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------|-----------------------------------------------------------------------|
| NW338_05900 | 922  | 812  | 854  | 1433 | 1869 | 1502 | 633  | 955  | 317  | 392  | 125  | 288  | 443  | 615  | 917  | 821  | <i>recA</i>  | recombinase RecA                                                      |
| NW338_05905 | 574  | 682  | 1062 | 1105 | 965  | 998  | 1249 | 1422 | 336  | 298  | 848  | 1187 | 1107 | 1307 | 387  | 1017 | <i>rny</i>   | ribonuclease Y                                                        |
| NW338_05910 | 0    | 74   | 0    | 53   | 177  | 292  | 48   | 136  | 7837 | 8366 | 6149 | 5424 | 732  | 1520 | 1230 | 765  | .            | hypothetical protein                                                  |
| NW338_05915 | 94   | 20   | 48   | 14   | 307  | 113  | 185  | 65   | 66   | 0    | 0    | 0    | 59   | 17   | 576  | 69   | .            | TIGR00282 family metallophosphoesterase                               |
| NW338_05920 | 16   | 78   | 100  | 95   | 110  | 79   | 103  | 112  | 0    | 0    | 60   | 28   | 263  | 31   | 96   | 103  | .            | 2-oxoacid:acceptor oxidoreductase subunit alpha                       |
| NW338_05925 | 136  | 85   | 183  | 238  | 86   | 185  | 204  | 195  | 0    | 74   | 153  | 234  | 54   | 185  | 106  | 219  | .            | 2-oxoacid:ferredoxin oxidoreductase subunit beta                      |
| NW338_05930 | 0    | 97   | 0    | 111  | 85   | 0    | 0    | 108  | 0    | 0    | 0    | 0    | 0    | 46   | 0    | 60   | .            | MTH1187 family thiamine-binding protein                               |
| NW338_05935 | 18   | 99   | 128  | 116  | 93   | 72   | 79   | 171  | 76   | 10   | 98   | 0    | 179  | 35   | 232  | 66   | <i>miaB</i>  | tRNA (N6-isopentenyl) adenosine(37)-C2)-methylthiotransferase MiaB    |
| NW338_05940 | 0    | 78   | 53   | 235  | 314  | 164  | 263  | 261  | 0    | 44   | 0    | 0    | 0    | 149  | 0    | 285  | .            | RicAFT regulatory complex protein RicA family protein                 |
| NW338_05945 | 0    | 220  | 152  | 473  | 206  | 219  | 321  | 163  | 243  | 234  | 214  | 393  | 194  | 352  | 0    | 340  | <i>thiW</i>  | energy coupling factor transporter S component ThiW                   |
| NW338_05950 | 56   | 17   | 114  | 27   | 81   | 72   | 95   | 97   | 20   | 19   | 0    | 19   | 18   | 0    | 65   | 54   | <i>mutS</i>  | DNA mismatch repair protein MutS                                      |
| NW338_05955 | 69   | 78   | 84   | 73   | 122  | 176  | 219  | 101  | 0    | 0    | 64   | 0    | 59   | 13   | 0    | 24   | <i>mutL</i>  | DNA mismatch repair endonuclease MutL                                 |
| NW338_05960 | 165  | 0    | 36   | 35   | 46   | 86   | 19   | 80   | 0    | 30   | 81   | 45   | 0    | 192  | 172  | 33   | .            | glycerol-3-phosphate responsive antiterminator                        |
| NW338_05965 | 389  | 467  | 479  | 280  | 1032 | 905  | 336  | 390  | 418  | 547  | 678  | 316  | 872  | 659  | 112  | 1225 | .            | aquaporin family protein                                              |
| NW338_05970 | 303  | 119  | 110  | 136  | 250  | 459  | 335  | 421  | 189  | 269  | 146  | 474  | 343  | 160  | 174  | 257  | <i>glpK</i>  | glycerol kinase GlpK                                                  |
| NW338_05975 | 3449 | 3102 | 1921 | 2145 | 1437 | 1465 | 1653 | 1571 | 601  | 771  | 1012 | 1486 | 1477 | 3443 | 1734 | 2977 | .            | glycerol-3-phosphate dehydrogenase/oxidase                            |
| NW338_05980 | 51   | 62   | 28   | 51   | 0    | 27   | 23   | 91   | 0    | 54   | 69   | 0    | 88   | 335  | 0    | 0    | .            | alpha/beta hydrolase                                                  |
| NW338_05985 | 49   | 37   | 84   | 81   | 99   | 66   | 33   | 175  | 0    | 0    | 0    | 54   | 83   | 14   | 0    | 25   | <i>miaA</i>  | tRNA (adenosine(37)-N6)-dimethylallyltransferase MiaA                 |
| NW338_05990 | 185  | 41   | 193  | 189  | 0    | 230  | 560  | 267  | 0    | 0    | 0    | 913  | 0    | 58   | 0    | 609  | <i>hfq</i>   | RNA chaperone Hfq                                                     |
| NW338_05995 | 210  | 547  | 251  | 306  | 52   | 290  | 306  | 232  | 127  | 235  | 314  | 559  | 248  | 301  | 355  | 280  | .            | glutathione peroxidase                                                |
| NW338_06000 | 0    | 15   | 0    | 41   | 0    | 39   | 8    | 54   | 0    | 0    | 0    | 41   | 29   | 22   | 0    | 31   | <i>hflX</i>  | GTPase HflX                                                           |
| NW338_06005 | 37   | 28   | 47   | 43   | 20   | 31   | 75   | 94   | 49   | 13   | 36   | 20   | 29   | 33   | 214  | 72   | .            | aminotransferase class I/II-fold pyridoxal phosphate-dependent enzyme |
| NW338_06010 | 126  | 198  | 210  | 258  | 0    | 310  | 424  | 175  | 164  | 333  | 240  | 137  | 730  | 250  | 1440 | 514  | .            | MerR family transcriptional regulator                                 |
| NW338_06015 | 568  | 480  | 399  | 477  | 664  | 678  | 520  | 784  | 323  | 333  | 381  | 429  | 2268 | 1892 | 1615 | 1670 | <i>glnA</i>  | type I glutamate--ammonia ligase                                      |
| NW338_06100 | 0    | 15   | 54   | 0    | 0    | 0    | 20   | 21   | 0    | 16   | 0    | 0    | 0    | 0    | 0    | 0    | .            | low specificity L-threonine aldolase                                  |
| NW338_06105 | 0    | 144  | 98   | 128  | 0    | 299  | 104  | 256  | 2381 | 3456 | 2411 | 2188 | 180  | 206  | 464  | 193  | .            | hypothetical protein                                                  |
| NW338_06110 | 113  | 78   | 48   | 55   | 182  | 154  | 72   | 81   | 0    | 43   | 129  | 130  | 23   | 140  | 0    | 121  | <i>cls</i>   | cardiolipin synthase                                                  |
| NW338_06115 | 0    | 0    | 0    | 30   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .            | ABC transporter ATP-binding protein                                   |
| NW338_06120 | 0    | 0    | 0    | 26   | 0    | 8    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 75   | .            | ABC transporter permease                                              |
| NW338_06125 | 79   | 9    | 0    | 28   | 0    | 6    | 9    | 0    | 0    | 0    | 41   | 0    | 86   | 0    | 159  | 0    | .            | sensor histidine kinase                                               |
| NW338_06130 | 0    | 16   | 0    | 19   | 41   | 0    | 17   | 0    | 0    | 0    | 69   | 0    | 0    | 0    | 0    | 29   | .            | response regulator transcription factor                               |
| NW338_06135 | 0    | 219  | 0    | 122  | 0    | 0    | 0    | 0    | 632  | 905  | 1336 | 685  | 965  | 487  | 0    | 323  | .            | LapA family protein                                                   |
| NW338_06140 | 0    | 0    | 0    | 35   | 0    | 12   | 0    | 37   | 0    | 30   | 0    | 0    | 67   | 0    | 0    | 48   | .            | thermonuclease family protein                                         |
| NW338_06145 | 138  | 93   | 138  | 141  | 197  | 192  | 60   | 178  | 61   | 449  | 673  | 285  | 83   | 215  | 0    | 259  | .            | hypothetical protein                                                  |
| NW338_06150 | 260  | 44   | 67   | 24   | 66   | 177  | 149  | 34   | 307  | 223  | 418  | 169  | 555  | 209  | 297  | 380  | .            | hypothetical protein                                                  |
| NW338_06155 | 72   | 14   | 37   | 37   | 0    | 4    | 15   | 43   | 0    | 23   | 128  | 71   | 42   | 81   | 0    | 34   | .            | aspartate kinase                                                      |
| NW338_06160 | 260  | 104  | 624  | 486  | 144  | 132  | 274  | 615  | 218  | 12   | 134  | 57   | 0    | 0    | 271  | 101  | .            | homoserine dehydrogenase                                              |
| NW338_06165 | 336  | 291  | 556  | 1070 | 385  | 373  | 934  | 1041 | 366  | 46   | 0    | 93   | 310  | 345  | 0    | 219  | <i>thrC</i>  | threonine synthase                                                    |
| NW338_06170 | 0    | 160  | 163  | 426  | 55   | 84   | 273  | 447  | 66   | 18   | 46   | 110  | 117  | 59   | 0    | 161  | <i>thrB</i>  | homoserine kinase                                                     |
| NW338_06175 | 232  | 194  | 375  | 479  | 372  | 396  | 184  | 711  | 65   | 61   | 104  | 91   | 145  | 504  | 628  | 253  | .            | Cof-type HAD-IIB family hydrolase                                     |
| NW338_06180 | 328  | 111  | 82   | 81   | 121  | 143  | 224  | 0    | 167  | 496  | 1265 | 398  | 488  | 86   | 0    | 327  | .            | hypothetical protein                                                  |
| NW338_06190 | 51   | 13   | 105  | 81   | 421  | 467  | 338  | 401  | 226  | 252  | 176  | 94   | 258  | 253  | 126  | 257  | .            | amino acid permease                                                   |
| NW338_06195 | 401  | 390  | 664  | 1112 | 600  | 638  | 1197 | 1664 | 263  | 328  | 144  | 538  | 541  | 855  | 768  | 1337 | .            | catalase                                                              |
| NW338_06200 | 576  | 893  | 2565 | 2585 | 1204 | 704  | 2065 | 1775 | 2685 | 642  | 2306 | 1076 | 788  | 181  | 613  | 661  | <i>rpmG</i>  | 50S ribosomal protein L33                                             |
| NW338_06205 | 160  | 95   | 492  | 207  | 93   | 0    | 395  | 379  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>rpsN</i>  | 30S ribosomal protein S14                                             |
| NW338_06210 | 58   | 0    | 20   | 19   | 0    | 25   | 21   | 42   | 0    | 33   | 88   | 126  | 48   | 353  | 188  | 99   | <i>guaC</i>  | GMP reductase                                                         |
| NW338_06220 | 29   | 59   | 146  | 33   | 66   | 33   | 41   | 40   | 60   | 105  | 145  | 168  | 416  | 305  | 392  | 181  | .            | CAP domain-containing protein                                         |
| NW338_06225 | 1811 | 1129 | 1162 | 1469 | 3107 | 2364 | 1161 | 1471 | 3548 | 2007 | 1101 | 983  | 1740 | 1821 | 983  | 1019 | <i>lexA</i>  | transcriptional repressor LexA                                        |
| NW338_06230 | 0    | 0    | 0    | 99   | 107  | 90   | 88   | 296  | 0    | 0    | 271  | 320  | 0    | 0    | 0    | 0    | .            | hypothetical protein                                                  |
| NW338_06235 | 0    | 0    | 108  | 154  | 280  | 201  | 632  | 534  | 0    | 0    | 0    | 0    | 148  | 170  | 0    | 201  | .            | DUF896 domain-containing protein                                      |
| NW338_06245 | 235  | 131  | 308  | 549  | 554  | 135  | 127  | 214  | 216  | 0    | 0    | 201  | 944  | 336  | 0    | 324  | .            | YneF family protein                                                   |
| NW338_06255 | 0    | 41   | 209  | 59   | 513  | 53   | 294  | 43   | 480  | 297  | 279  | 212  | 490  | 306  | 393  | 536  | .            | CdcC family protein                                                   |
| NW338_06260 | 25   | 8    | 46   | 12   | 0    | 5    | 0    | 0    | 0    | 14   | 0    | 22   | 241  | 271  | 233  | 65   | .            | exonuclease SbcCD subunit D                                           |
| NW338_06270 | 680  | 518  | 574  | 685  | 571  | 201  | 446  | 254  | 618  | 1804 | 1144 | 269  | 228  | 150  | 0    | 326  | <i>mscL</i>  | large conductance mechanosensitive channel protein MscL               |
| NW338_06275 | 26   | 133  | 30   | 103  | 265  | 309  | 377  | 248  | 68   | 139  | 170  | 139  | 389  | 151  | 103  | 199  | .            | BCCT family transporter                                               |
| NW338_06280 | 752  | 684  | 646  | 593  | 369  | 309  | 280  | 364  | 700  | 305  | 213  | 411  | 1535 | 1143 | 579  | 1256 | <i>acnA</i>  | aconitate hydratase AcnA                                              |
| NW338_06285 | 313  | 374  | 526  | 128  | 631  | 462  | 599  | 410  | 129  | 228  | 0    | 52   | 405  | 174  | 568  | 525  | .            | acyl-CoA thioesterase                                                 |
| NW338_06290 | 962  | 965  | 481  | 445  | 569  | 447  | 273  | 428  | 1009 | 747  | 1007 | 1382 | 120  | 264  | 570  | 163  | .            | HesB/YadR/YfhF family protein                                         |
| NW338_06295 | 284  | 241  | 342  | 248  | 63   | 223  | 17   | 93   | 976  | 805  | 1061 | 874  | 1322 | 931  | 1040 | 932  | <i>plsY</i>  | glycerol-3-phosphate 1-O-acyltransferase PlsY                         |
| NW338_06300 | 22   | 69   | 42   | 78   | 197  | 133  | 398  | 152  | 0    | 0    | 42   | 104  | 77   | 106  | 46   | 63   | <i>parE</i>  | DNA topoisomerase IV subunit B                                        |
| NW338_06305 | 24   | 89   | 128  | 98   | 205  | 141  | 283  | 230  | 50   | 54   | 36   | 31   | 84   | 129  | 0    | 172  | <i>parC</i>  | DNA topoisomerase IV subunit A                                        |
| NW338_06310 | 208  | 52   | 236  | 145  | 356  | 422  | 542  | 347  | 77   | 56   | 89   | 123  | 198  | 273  | 585  | 567  | .            | alanine:cation symporter family protein                               |
| NW338_06315 | 0    | 11   | 65   | 136  | 29   | 96   | 0    | 128  | 0    | 19   | 74   | 125  | 0    | 69   | 0    | 24   | .            | transcription antiterminator                                          |
| NW338_06325 | 94   | 248  | 271  | 384  | 108  | 162  | 68   | 160  | 192  | 236  | 353  | 122  | 292  | 175  | 76   | 398  | <i>cozEb</i> | cell elongation protein CozEb                                         |
| NW338_06330 | 183  | 438  | 299  | 376  | 226  | 165  | 137  | 128  | 48   | 101  | 84   | 107  | 158  | 107  | 178  | 170  | <i>mprF</i>  | bifunctional lysylphosphatidylglycerol flippase/synthetase MprF       |
| NW338_06335 | 147  | 112  | 139  | 95   | 49   | 61   | 61   | 134  | 206  | 128  | 164  | 143  | 92   | 187  | 332  | 471  | <i>msrA</i>  | peptide-methionine (S)-S-oxide reductase MsrA                         |
| NW338_06340 | 0    | 55   | 128  | 45   | 117  | 167  | 77   | 82   | 0    | 16   | 42   | 25   | 429  | 300  | 0    | 138  | .            | LCP family protein                                                    |
| NW338_06345 | 958  | 1232 | 754  | 697  | 1114 | 502  | 546  | 386  | 1480 | 3175 | 2439 | 2351 | 1433 | 3428 | 0    | 1858 | .            | 4-oxalocrotonate tautomerase                                          |
| NW338_06350 | 0    | 8    | 23   | 50   | 30   | 32   | 8    | 32   | 48   | 97   | 83   | 64   | 96   | 215  | 107  | 36   | .            | Y-family DNA polymerase                                               |
| NW338_06355 | 0    | 0    | 0    | 83   | 23   | 30   | 9    | 11   | 55   | 0    | 38   | 0    | 140  | 34   | 0    | 201  | .            | prephenate dehydrogenase                                              |
| NW338_06360 | 167  | 111  | 19   | 67   | 24   | 32   | 30   | 41   | 117  | 94   | 185  | 125  | 46   | 92   | 168  | 129  | .            | M42 family metallopeptidase                                           |
| NW338_06365 | 0    | 0    | 0    | 0    | 0    | 0    | 58   | 0    | 0    | 0    | 0    | 36   | 25   | 10   | 0    | 0    | .            | anthranilate synthase component I                                     |
| NW338_06370 | 0    | 0    | 0    | 0    | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .            | aminodeoxychorismate/anthranilate synthase component II               |
| NW338_06380 | 0    | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 17   | 0    | 0    | <i>trpC</i>  | indole-3-glycerol phosphate synthase TrpC                             |
| NW338_06385 | 0    | 0    | 0    | 30   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .            | phosphoribosylanthranilate isomerase                                  |
| NW338_06390 | 0    | 13   | 42   | 23   | 21   | 22   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>trpB</i>  | tryptophan synthase subunit beta                                      |
| NW338_06395 | 39   | 13   | 0    | 16   | 34   | 8    | 0    | 26   | 0    | 0    | 0    | 0    | 0    | 152  | 0    | 0    | <i>trpA</i>  | tryptophan synthase subunit alpha                                     |
| NW338_06400 | 79   | 86   | 133  | 182  | 109  | 121  | 213  | 173  | 0    | 39   | 35   | 144  | 200  | 32   | 138  | 180  | <i>femA</i>  | glycine glycyltransferase FemA                                        |
| NW338_06405 | 187  | 99   | 354  | 507  | 70   | 307  | 2    |      |      |      |      |      |      |      |      |      |              |                                                                       |

|             |       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |       |              |                                                                                 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|--------------|---------------------------------------------------------------------------------|
| NW338_06475 | 0     | 10    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 92    | 45    | 51    | 0     | 16   | 0    | 147   | .            | phosphate ABC transporter substrate-binding protein PstS                        |
| NW338_06485 | 396   | 384   | 209   | 528   | 194   | 463   | 291   | 246   | 242   | 416   | 233   | 297   | 498   | 49   | 0    | 232   | <i>cvfB</i>  | RNA-binding virulence regulatory protein CvfB                                   |
| NW338_06490 | 18    | 129   | 47    | 101   | 159   | 161   | 185   | 185   | 37    | 205   | 52    | 82    | 228   | 527  | 588  | 115   | .            | ATP-binding cassette domain-containing protein                                  |
| NW338_06495 | 38    | 21    | 132   | 202   | 0     | 43    | 486   | 214   | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 25    | .            | aspartate kinase                                                                |
| NW338_06500 | 58    | 55    | 115   | 112   | 118   | 149   | 273   | 263   | 0     | 0     | 0     | 0     | 0     | 14   | 176  | 62    | .            | aspartate-semialdehyde dehydrogenase                                            |
| NW338_06505 | 52    | 22    | 193   | 78    | 43    | 74    | 190   | 182   | 0     | 18    | 0     | 0     | 0     | 58   | 103  | 43    | <i>dapA</i>  | 4-hydroxy-tetrahydronicotinate synthase                                         |
| NW338_06510 | 60    | 49    | 116   | 340   | 0     | 74    | 288   | 726   | 0     | 68    | 0     | 140   | 65    | 0    | 0    | 100   | <i>dapB</i>  | 4-hydroxy-tetrahydronicotinate reductase                                        |
| NW338_06515 | 168   | 124   | 233   | 402   | 147   | 180   | 650   | 648   | 245   | 126   | 0     | 190   | 99    | 185  | 241  | 143   | <i>dapD</i>  | 2,3,4,5-tetrahydropyridine-2,6-dicarboxylate N-acetyltransferase                |
| NW338_06520 | 0     | 14    | 39    | 20    | 43    | 63    | 9     | 100   | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 11    | .            | amidohydrolase                                                                  |
| NW338_06525 | 43    | 53    | 0     | 109   | 0     | 49    | 38    | 11    | 0     | 44    | 0     | 93    | 0     | 0    | 0    | 28    | .            | alanine racemase                                                                |
| NW338_06530 | 37    | 55    | 74    | 129   | 110   | 98    | 113   | 295   | 46    | 13    | 35    | 305   | 66    | 22   | 352  | 121   | <i>lysA</i>  | diaminopimelate decarboxylase                                                   |
| NW338_06540 | 7184  | 7008  | 7959  | 8653  | 43304 | 56489 | 19628 | 19095 | 8685  | 9139  | 5625  | 7306  | 15715 | 9013 | 5651 | 19974 | <i>cspA</i>  | cold shock protein CspA                                                         |
| NW338_06545 | 0     | 0     | 230   | 239   | 0     | 186   | 345   | 179   | 392   | 346   | 143   | 716   | 705   | 44   | 0    | 197   | <i>msaA</i>  | regulatory protein MsaA                                                         |
| NW338_06550 | 703   | 236   | 431   | 419   | 952   | 192   | 421   | 541   | 0     | 119   | 319   | 271   | 306   | 101  | 1881 | 905   | .            | acylphosphatase                                                                 |
| NW338_06555 | 114   | 217   | 139   | 280   | 140   | 192   | 265   | 122   | 93    | 0     | 137   | 417   | 75    | 44   | 0    | 234   | .            | 5-bromo-4-chloroindolyl phosphate hydrolysis family protein                     |
| NW338_06560 | 223   | 481   | 461   | 570   | 255   | 161   | 100   | 382   | 320   | 128   | 450   | 678   | 635   | 369  | 230  | 516   | .            | toxic anion resistance protein                                                  |
| NW338_06565 | 0     | 29    | 58    | 29    | 104   | 29    | 15    | 70    | 0     | 12    | 66    | 140   | 30    | 190  | 225  | 170   | <i>brnQ</i>  | branched-chain amino acid transport system II carrier protein                   |
| NW338_06570 | 144   | 145   | 108   | 232   | 202   | 173   | 492   | 749   | 0     | 0     | 138   | 112   | 25    | 0    | 49   | 152   | .            | nitric oxide reductase activation protein NorD                                  |
| NW338_06575 | 36    | 12    | 107   | 41    | 0     | 87    | 115   | 199   | 66    | 0     | 106   | 31    | 59    | 17   | 0    | 77    | .            | MoxR family ATPase                                                              |
| NW338_06580 | 279   | 250   | 764   | 490   | 0     | 221   | 354   | 571   | 0     | 79    | 434   | 367   | 461   | 0    | 0    | 212   | .            | DUF6501 family protein                                                          |
| NW338_06585 | 950   | 960   | 1039  | 1369  | 739   | 936   | 1047  | 1377  | 287   | 59    | 377   | 695   | 538   | 457  | 1010 | 777   | .            | VOC family protein                                                              |
| NW338_06590 | 1187  | 970   | 519   | 545   | 569   | 437   | 411   | 291   | 650   | 468   | 277   | 376   | 280   | 444  | 343  | 1034  | <i>sucB</i>  | dihydrolipoylysine-residue succinyltransferase                                  |
| NW338_06595 | 993   | 855   | 595   | 518   | 440   | 432   | 143   | 251   | 323   | 312   | 182   | 290   | 614   | 726  | 535  | 613   | .            | 2-oxoglutarate dehydrogenase E1 component                                       |
| NW338_06600 | 87    | 54    | 14    | 38    | 0     | 119   | 8     | 69    | 0     | 79    | 126   | 0     | 344   | 21   | 129  | 84    | <i>arlS</i>  | sensor histidine kinase ArlS                                                    |
| NW338_06605 | 43    | 82    | 129   | 77    | 38    | 68    | 114   | 64    | 0     | 24    | 0     | 37    | 72    | 78   | 0    | 19    | <i>arlR</i>  | response regulator transcription factor ArlR                                    |
| NW338_06620 | 0     | 0     | 48    | 19    | 0     | 123   | 50    | 52    | 386   | 547   | 144   | 79    | 116   | 339  | 283  | 248   | .            | phosphatase PAP2 family protein                                                 |
| NW338_06625 | 40    | 59    | 27    | 0     | 0     | 43    | 29    | 33    | 0     | 0     | 142   | 75    | 39    | 15   | 190  | 33    | .            | undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase |
| NW338_06630 | 0     | 0     | 146   | 27    | 0     | 41    | 159   | 74    | 115   | 0     | 124   | 0     | 0     | 0    | 0    | 50    | .            | GNAT family N-acetyltransferase                                                 |
| NW338_06635 | 50    | 13    | 17    | 98    | 62    | 141   | 7     | 54    | 75    | 21    | 0     | 108   | 65    | 176  | 0    | 27    | .            | S41 family peptidase                                                            |
| NW338_06660 | 333   | 235   | 232   | 213   | 425   | 236   | 195   | 328   | 0     | 57    | 53    | 125   | 197   | 32   | 403  | 224   | <i>fakB2</i> | fatty acid kinase binding subunit FakB2                                         |
| NW338_06665 | 633   | 724   | 617   | 776   | 184   | 490   | 337   | 153   | 0     | 0     | 87    | 117   | 526   | 60   | 409  | 325   | .            | dihydrofolate reductase                                                         |
| NW338_06670 | 225   | 87    | 125   | 185   | 255   | 141   | 128   | 154   | 0     | 135   | 66    | 105   | 123   | 178  | 176  | 111   | .            | thymidylate synthase                                                            |
| NW338_06680 | 80    | 215   | 323   | 364   | 512   | 273   | 696   | 284   | 0     | 100   | 170   | 43    | 195   | 202  | 164  | 267   | .            | virulence factor                                                                |
| NW338_06685 | 0     | 76    | 373   | 0     | 0     | 81    | 0     | 84    | 0     | 0     | 0     | 224   | 0     | 204  | 672  | 288   | .            | NifU N-terminal domain-containing protein                                       |
| NW338_06695 | 0     | 0     | 0     | 16    | 0     | 9     | 0     | 0     | 74    | 0     | 0     | 0     | 0     | 0    | 0    | 0     | .            | queuosine precursor transporter                                                 |
| NW338_06700 | 0     | 0     | 0     | 0     | 0     | 15    | 26    | 0     | 0     | 123   | 214   | 61    | 0     | 0    | 0    | 0     | .            | ribonuclease HI family protein                                                  |
| NW338_06710 | 233   | 188   | 142   | 97    | 326   | 221   | 234   | 128   | 0     | 71    | 64    | 53    | 181   | 103  | 0    | 115   | <i>norB</i>  | multidrug efflux MFS transporter NorB                                           |
| NW338_06715 | 425   | 402   | 187   | 211   | 182   | 578   | 187   | 267   | 130   | 135   | 146   | 549   | 146   | 412  | 336  | 394   | .            | amino acid permease                                                             |
| NW338_06720 | 766   | 673   | 511   | 391   | 343   | 772   | 301   | 437   | 0     | 109   | 241   | 78    | 175   | 204  | 413  | 368   | <i>tdcB</i>  | bifunctional threonine ammonia-lyase/L-serine ammonia-lyase TdcB                |
| NW338_06725 | 303   | 259   | 299   | 168   | 290   | 168   | 258   | 214   | 0     | 14    | 114   | 87    | 158   | 190  | 877  | 179   | <i>ald</i>   | alanine dehydrogenase                                                           |
| NW338_06730 | 150   | 145   | 95    | 84    | 115   | 208   | 116   | 127   | 198   | 18    | 48    | 0     | 274   | 182  | 193  | 98    | .            | 5'-3' exonuclease                                                               |
| NW338_06740 | 0     | 0     | 0     | 0     | 0     | 14    | 0     | 9     | 0     | 0     | 31    | 36    | 27    | 20   | 0    | 77    | .            | PepSY domain-containing protein                                                 |
| NW338_06750 | 40    | 31    | 124   | 34    | 22    | 116   | 27    | 61    | 51    | 14    | 150   | 70    | 41    | 32   | 0    | 30    | .            | class I SAM-dependent RNA methyltransferase                                     |
| NW338_06760 | 83    | 369   | 254   | 612   | 306   | 197   | 90    | 55    | 475   | 426   | 250   | 358   | 1995  | 416  | 981  | 1010  | <i>gpsB</i>  | cell division regulator GpsB                                                    |
| NW338_06765 | 235   | 85    | 235   | 221   | 412   | 427   | 762   | 113   | 607   | 57    | 187   | 89    | 490   | 289  | 600  | 480   | .            | DUF1273 domain-containing protein                                               |
| NW338_06770 | 132   | 0     | 129   | 161   | 142   | 155   | 29    | 27    | 0     | 324   | 924   | 352   | 317   | 0    | 495  | 174   | .            | YppE family protein                                                             |
| NW338_06780 | 45    | 157   | 0     | 107   | 40    | 106   | 49    | 83    | 0     | 183   | 202   | 0     | 320   | 354  | 540  | 351   | <i>recU</i>  | Holliday junction resolvase RecU                                                |
| NW338_06785 | 577   | 416   | 430   | 544   | 634   | 488   | 702   | 544   | 843   | 570   | 794   | 926   | 1918  | 1451 | 1729 | 1210  | .            | penicillin-binding protein                                                      |
| NW338_06790 | 0     | 0     | 380   | 129   | 0     | 36    | 30    | 217   | 0     | 0     | 129   | 509   | 0     | 0    | 0    | 216   | .            | hypothetical protein                                                            |
| NW338_06800 | 0     | 42    | 349   | 105   | 36    | 18    | 30    | 140   | 0     | 0     | 218   | 144   | 120   | 0    | 0    | 106   | .            | DnaD domain-containing protein                                                  |
| NW338_06805 | 346   | 276   | 254   | 300   | 486   | 330   | 421   | 540   | 0     | 171   | 251   | 101   | 373   | 233  | 415  | 222   | <i>asnS</i>  | asparagine--tRNA ligase                                                         |
| NW338_06810 | 48    | 36    | 126   | 131   | 58    | 72    | 119   | 42    | 67    | 60    | 72    | 9     | 132   | 69   | 187  | 121   | .            | ATP-dependent DNA helicase DinG                                                 |
| NW338_06815 | 44    | 72    | 27    | 86    | 186   | 160   | 99    | 51    | 0     | 203   | 89    | 166   | 0     | 109  | 0    | 44    | .            | biotin--[acetyl-CoA-carboxylase] ligase                                         |
| NW338_06820 | 38    | 71    | 105   | 60    | 136   | 87    | 80    | 97    | 0     | 13    | 37    | 234   | 117   | 65   | 0    | 55    | .            | CCA tRNA nucleotidyltransferase                                                 |
| NW338_06825 | 40    | 39    | 165   | 69    | 22    | 45    | 253   | 108   | 97    | 14    | 92    | 120   | 31    | 24   | 148  | 159   | <i>bshA</i>  | N-acetyl-alpha-D-glucosaminyl L-malate synthase BshA                            |
| NW338_06830 | 272   | 0     | 0     | 44    | 0     | 231   | 222   | 152   | 191   | 50    | 0     | 0     | 0     | 128  | 0    | 308   | .            | nucleotide pyrophosphohydrolase                                                 |
| NW338_06840 | 0     | 76    | 83    | 189   | 65    | 42    | 0     | 113   | 0     | 0     | 0     | 0     | 361   | 116  | 0    | 229   | .            | DUF1405 domain-containing protein                                               |
| NW338_06845 | 0     | 0     | 130   | 40    | 117   | 36    | 131   | 55    | 193   | 169   | 218   | 130   | 221   | 331  | 0    | 95    | .            | YpiB family protein                                                             |
| NW338_06850 | 103   | 95    | 144   | 291   | 122   | 159   | 244   | 142   | 47    | 53    | 0     | 65    | 241   | 201  | 420  | 182   | .            | hypothetical protein                                                            |
| NW338_06855 | 77    | 191   | 122   | 227   | 136   | 284   | 187   | 161   | 40    | 12    | 133   | 0     | 184   | 241  | 155  | 75    | <i>aroA</i>  | 3-phosphoshikimate 1-carboxyvinyltransferase                                    |
| NW338_06860 | 161   | 113   | 198   | 259   | 47    | 128   | 100   | 55    | 57    | 186   | 201   | 209   | 132   | 77   | 86   | 113   | <i>aroB</i>  | 3-dehydroquinate synthase                                                       |
| NW338_06865 | 40    | 93    | 164   | 143   | 133   | 144   | 201   | 186   | 0     | 42    | 0     | 111   | 40    | 115  | 0    | 0     | <i>aroC</i>  | chorismate synthase                                                             |
| NW338_06875 | 977   | 339   | 580   | 206   | 536   | 731   | 237   | 253   | 1408  | 1547  | 761   | 492   | 668   | 349  | 204  | 560   | <i>ndk</i>   | nucleoside-diphosphate kinase                                                   |
| NW338_06880 | 30    | 27    | 87    | 82    | 172   | 297   | 64    | 113   | 109   | 0     | 110   | 53    | 116   | 149  | 458  | 209   | .            | polyprenyl synthetase family protein                                            |
| NW338_06885 | 39    | 88    | 281   | 105   | 283   | 169   | 329   | 117   | 0     | 125   | 0     | 0     | 0     | 276  | 211  | 169   | .            | demethylmenaquinone methyltransferase                                           |
| NW338_06890 | 50    | 17    | 34    | 40    | 87    | 266   | 0     | 141   | 0     | 0     | 221   | 0     | 0     | 0    | 0    | 142   | .            | heptaprenyl diphosphate synthase component 1                                    |
| NW338_06895 | 23956 | 24712 | 20288 | 16000 | 17163 | 23260 | 9188  | 12969 | 12100 | 13481 | 15030 | 14637 | 4928  | 4994 | 7401 | 5338  | .            | HU family DNA-binding protein                                                   |
| NW338_06900 | 129   | 201   | 228   | 310   | 359   | 223   | 260   | 270   | 0     | 98    | 0     | 156   | 194   | 0    | 261  | 255   | .            | NAD(P)H-dependent glycerol-3-phosphate dehydrogenase                            |
| NW338_06905 | 155   | 216   | 319   | 358   | 393   | 376   | 250   | 276   | 91    | 50    | 194   | 133   | 660   | 553  | 413  | 350   | <i>der</i>   | ribosome biogenesis GTPase Der                                                  |
| NW338_06910 | 1915  | 1372  | 1887  | 1805  | 1738  | 1303  | 1039  | 1283  | 1165  | 1141  | 1235  | 779   | 1270  | 1209 | 500  | 752   | <i>rpsA</i>  | 30S ribosomal protein S1                                                        |
| NW338_06930 | 45    | 10    | 27    | 0     | 95    | 61    | 73    | 63    | 0     | 16    | 43    | 0     | 45    | 0    | 0    | 71    | .            | asparaginase                                                                    |
| NW338_06935 | 120   | 287   | 230   | 330   | 25    | 99    | 129   | 108   | 123   | 32    | 342   | 216   | 48    | 249  | 0    | 349   | .            | YpdA family putative bacillithiol disulfide reductase                           |
| NW338_06945 | 1180  | 744   | 1257  | 813   | 678   | 434   | 386   | 281   | 429   | 217   | 667   | 416   | 433   | 598  | 328  | 865   | <i>ebpS</i>  | elastin-binding protein EbpS                                                    |
| NW338_06950 | 65    | 21    | 54    | 81    | 64    | 43    | 0     | 14    | 0     | 0     | 0     | 0     | 80    | 10   | 0    | 87    | .            | ATP-dependent DNA helicase                                                      |
| NW338_06955 | 30    | 17    | 0     | 29    | 26    | 29    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 49    | .            | helix-turn-helix domain-containing protein                                      |
| NW338_06960 | 114   | 102   | 315   | 375   | 0     | 106   | 124   | 165   | 0     | 263   | 0     | 777   | 0     | 206  | 680  | 445   | .            | ferredoxin                                                                      |
| NW338_06965 | 210   | 47    | 177   | 290   | 162   | 126   | 224   | 220   | 216   | 0     | 517   | 698   | 433   | 897  | 0    | 631   | .            | ECF transporter S component                                                     |
| NW338_06975 | 0     | 0     | 28    | 0     | 27    | 0     | 11    | 36    | 0     | 0     | 45    | 0     | 0     | 0    | 0    | 0     | .            | DUF1                                                                            |

|             |      |      |      |      |      |      |      |      |       |       |       |       |      |      |      |      |                                        |                                                                           |
|-------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|----------------------------------------|---------------------------------------------------------------------------|
| NW338_07385 | 578  | 386  | 939  | 977  | 600  | 475  | 997  | 955  | 233   | 375   | 334   | 383   | 417  | 320  | 114  | 480  | <i>zwf</i>                             | glucose-6-phosphate dehydrogenase                                         |
| NW338_07390 | 454  | 441  | 478  | 777  | 421  | 278  | 807  | 668  | 198   | 586   | 576   | 589   | 327  | 109  | 514  | 334  | .                                      | AraC family transcriptional regulator                                     |
| NW338_07395 | 384  | 436  | 153  | 152  | 120  | 59   | 132  | 62   | 195   | 142   | 79    | 78    | 282  | 232  | 317  | 179  | .                                      | alpha-glucosidase                                                         |
| NW338_07400 | 0    | 44   | 73   | 11   | 128  | 52   | 0    | 38   | 111   | 0     | 0     | 105   | 0    | 30   | 0    | 39   | .                                      | LacI family DNA-binding transcriptional regulator                         |
| NW338_07410 | 0    | 120  | 149  | 343  | 857  | 266  | 194  | 351  | 0     | 0     | 0     | 0     | 408  | 624  | 1626 | 969  | .                                      | VOC family protein                                                        |
| NW338_07425 | 1240 | 1021 | 1345 | 1560 | 701  | 666  | 542  | 649  | 1009  | 1215  | 1093  | 960   | 966  | 649  | 1247 | 1030 | <i>gndA</i>                            | NADP-dependent phosphogluconate dehydrogenase                             |
| NW338_07430 | 429  | 284  | 498  | 605  | 147  | 106  | 197  | 385  | 100   | 0     | 193   | 137   | 309  | 43   | 290  | 301  | .                                      | tripeptidase T                                                            |
| NW338_07435 | 0    | 0    | 0    | 0    | 0    | 113  | 0    | 0    | 0     | 89    | 352   | 0     | 815  | 0    | 0    | 212  | <i>prlI42</i>                          | stressosome-associated protein PrlI42                                     |
| NW338_07440 | 146  | 227  | 122  | 149  | 25   | 293  | 11   | 115  | 53    | 33    | 43    | 57    | 180  | 80   | 94   | 184  | .                                      | aromatic acid exporter family protein                                     |
| NW338_07445 | 204  | 146  | 453  | 408  | 57   | 330  | 421  | 465  | 0     | 186   | 0     | 415   | 0    | 336  | 210  | 58   | .                                      | BrxA/BrxB family bacilliredoxin                                           |
| NW338_07450 | 1003 | 1299 | 694  | 667  | 392  | 592  | 758  | 586  | 491   | 396   | 235   | 348   | 740  | 313  | 550  | 516  | .                                      | 2-oxo acid dehydrogenase subunit E2                                       |
| NW338_07455 | 897  | 1081 | 714  | 786  | 478  | 648  | 532  | 490  | 474   | 265   | 327   | 479   | 1260 | 1027 | 801  | 1114 | .                                      | alpha-ketoacid dehydrogenase subunit beta                                 |
| NW338_07460 | 1206 | 1016 | 771  | 730  | 1069 | 648  | 1022 | 1004 | 165   | 190   | 365   | 200   | 0    | 252  | 297  | 316  | .                                      | thiamine pyrophosphate-dependent dehydrogenase E1 component subunit alpha |
| NW338_07465 | 704  | 513  | 673  | 534  | 362  | 292  | 321  | 284  | 0     | 45    | 62    | 122   | 174  | 173  | 0    | 221  | <i>lpdA</i>                            | dihydrolipoyl dehydrogenase                                               |
| NW338_07470 | 382  | 288  | 201  | 195  | 275  | 293  | 67   | 150  | 0     | 186   | 359   | 108   | 21   | 136  | 101  | 77   | <i>recN</i>                            | DNA repair protein RecN                                                   |
| NW338_07475 | 165  | 359  | 100  | 56   | 602  | 126  | 46   | 234  | 134   | 0     | 140   | 607   | 349  | 90   | 0    | 78   | <i>argR</i>                            | transcriptional regulator ArgR                                            |
| NW338_07480 | 344  | 418  | 143  | 502  | 440  | 436  | 648  | 291  | 60    | 18    | 198   | 286   | 94   | 15   | 301  | 276  | .                                      | polyprenyl synthetase family protein                                      |
| NW338_07485 | 201  | 0    | 84   | 181  | 324  | 53   | 134  | 209  | 0     | 0     | 181   | 0     | 204  | 741  | 0    | 132  | .                                      | exodeoxyribonuclease VII small subunit                                    |
| NW338_07490 | 235  | 135  | 177  | 137  | 451  | 326  | 186  | 161  | 168   | 110   | 225   | 18    | 239  | 536  | 138  | 263  | <i>xseA</i>                            | exodeoxyribonuclease VII large subunit                                    |
| NW338_07500 | 442  | 175  | 153  | 300  | 174  | 264  | 28   | 91   | 0     | 0     | 115   | 139   | 130  | 75   | 253  | 49   | .                                      | Asp23/Gls24 family envelope stress response protein                       |
| NW338_07505 | 21   | 56   | 93   | 93   | 239  | 287  | 473  | 258  | 88    | 12    | 0     | 18    | 152  | 371  | 265  | 234  | <i>accC</i>                            | acetyl-CoA carboxylase biotin carboxylase subunit                         |
| NW338_07510 | 0    | 178  | 222  | 79   | 544  | 183  | 610  | 340  | 127   | 0     | 90    | 52    | 340  | 287  | 0    | 520  | <i>accB</i>                            | acetyl-CoA carboxylase biotin carboxyl carrier protein                    |
| NW338_07515 | 1406 | 2864 | 1789 | 1592 | 1627 | 2679 | 1095 | 1627 | 805   | 1970  | 963   | 1224  | 2403 | 1301 | 468  | 844  | <i>efp</i>                             | elongation factor P                                                       |
| NW338_07520 | 111  | 105  | 230  | 151  | 47   | 130  | 49   | 122  | 49    | 15    | 81    | 70    | 520  | 72   | 0    | 74   | .                                      | aminopeptidase P family protein                                           |
| NW338_07525 | 49   | 82   | 44   | 71   | 0    | 32   | 18   | 16   | 0     | 28    | 0     | 42    | 0    | 111  | 0    | 168  | .                                      | hypothetical protein                                                      |
| NW338_07530 | 0    | 0    | 0    | 202  | 422  | 192  | 47   | 43   | 0     | 592   | 202   | 572   | 0    | 435  | 773  | 453  | .                                      | hypothetical protein                                                      |
| NW338_07535 | 559  | 295  | 270  | 318  | 457  | 291  | 234  | 223  | 771   | 658   | 383   | 1018  | 997  | 959  | 613  | 564  | .                                      | lipote- $\gamma$ -protein ligase family protein                           |
| NW338_07540 | 0    | 156  | 319  | 343  | 323  | 214  | 80   | 204  | 313   | 207   | 439   | 335   | 501  | 0    | 1124 | 240  | .                                      | rhodanese-like domain-containing protein                                  |
| NW338_07545 | 152  | 314  | 187  | 439  | 477  | 320  | 488  | 372  | 265   | 99    | 235   | 110   | 296  | 197  | 230  | 339  | <i>gcvPB</i>                           | aminomethyl-transferring glycine dehydrogenase subunit GcvPB              |
| NW338_07550 | 162  | 154  | 303  | 197  | 115  | 114  | 196  | 142  | 218   | 0     | 94    | 78    | 302  | 147  | 129  | 257  | <i>gcvPA</i>                           | aminomethyl-transferring glycine dehydrogenase subunit GcvPA              |
| NW338_07555 | 66   | 67   | 157  | 311  | 314  | 186  | 298  | 213  | 55    | 187   | 79    | 120   | 251  | 329  | 940  | 420  | <i>gcvT</i>                            | glycine cleavage system aminomethyltransferase GcvT                       |
| NW338_07560 | 327  | 273  | 641  | 431  | 805  | 583  | 360  | 395  | 7283  | 7803  | 3925  | 3282  | 3330 | 4112 | 848  | 2703 | .                                      | shikimate kinase                                                          |
| NW338_07570 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | .                                      | prepilin-type N-terminal cleavage/methylation domain-containing protein   |
| NW338_07575 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 59   | .                                      | competence protein ComGE                                                  |
| NW338_07580 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | <i>comGD</i>                           | competence type IV pilus minor pilin ComGD                                |
| NW338_07585 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | <i>comGC</i>                           | competence type IV pilus major pilin ComGC                                |
| NW338_07590 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0    | <i>comGB</i>                           | competence type IV pilus assembly protein ComGB                           |
| NW338_07595 | 0    | 10   | 0    | 0    | 0    | 0    | 0    | 22   | 0     | 16    | 0     | 0     | 0    | 0    | 0    | 56   | <i>comGA</i>                           | competence type IV pilus ATPase ComGA                                     |
| NW338_07600 | 493  | 424  | 344  | 354  | 412  | 358  | 416  | 241  | 97    | 355   | 102   | 181   | 57   | 109  | 271  | 430  | .                                      | MBL fold metallo-hydrolase                                                |
| NW338_07605 | 400  | 444  | 274  | 176  | 396  | 200  | 219  | 189  | 0     | 380   | 171   | 393   | 517  | 0    | 247  | .    | MT1187 family thiamine-binding protein |                                                                           |
| NW338_07620 | 110  | 102  | 33   | 122  | 60   | 107  | 55   | 21   | 0     | 107   | 59    | 72    | 179  | 176  | 72   | 130  | .                                      | rhomboid family intramembrane serine protease                             |
| NW338_07625 | 158  | 188  | 48   | 185  | 46   | 272  | 0    | 61   | 875   | 586   | 159   | 240   | 517  | 1128 | 1839 | 1052 | .                                      | 5-formyltetrahydrofolate cyclo-ligase                                     |
| NW338_07630 | 499  | 637  | 867  | 1685 | 3173 | 2479 | 3106 | 952  | 350   | 1149  | 574   | 835   | 3799 | 2296 | 613  | 2390 | <i>rpmG</i>                            | 50S ribosomal protein L33                                                 |
| NW338_07635 | 77   | 89   | 106  | 100  | 402  | 176  | 91   | 183  | 136   | 106   | 206   | 63    | 0    | 57   | 217  | 143  | .                                      | penicillin-binding protein 2                                              |
| NW338_07640 | 3844 | 2978 | 5689 | 6208 | 1507 | 1185 | 1747 | 2649 | 2043  | 886   | 3168  | 2142  | 3394 | 1678 | 3078 | 3052 | .                                      | superoxide dismutase                                                      |
| NW338_07645 | 280  | 93   | 220  | 208  | 571  | 81   | 100  | 192  | 291   | 475   | 102   | 59    | 116  | 101  | 418  | 194  | .                                      | transcriptional repressor                                                 |
| NW338_07650 | 50   | 48   | 147  | 64   | 102  | 29   | 275  | 155  | 140   | 0     | 176   | 58    | 41   | 243  | 498  | 58   | .                                      | metal ABC transporter permease                                            |
| NW338_07655 | 36   | 97   | 82   | 147  | 0    | 94   | 26   | 91   | 0     | 20    | 110   | 95    | 60   | 153  | 221  | 257  | .                                      | metal ABC transporter ATP-binding protein                                 |
| NW338_07660 | 32   | 61   | 113  | 84   | 132  | 176  | 102  | 144  | 318   | 73    | 142   | 0     | 40   | 15   | 0    | 14   | .                                      | deoxyribonuclease IV                                                      |
| NW338_07665 | 74   | 24   | 236  | 133  | 47   | 136  | 219  | 324  | 83    | 0     | 0     | 93    | 35   | 157  | 194  | 77   | .                                      | DEAD/DEAH box helicase                                                    |
| NW338_07670 | 81   | 49   | 253  | 165  | 244  | 30   | 180  | 266  | 55    | 164   | 38    | 114   | 150  | 37   | 83   | 71   | .                                      | Nif3-like dinuclear metal center hexameric protein                        |
| NW338_07680 | 427  | 354  | 310  | 643  | 767  | 472  | 619  | 841  | 195   | 147   | 177   | 428   | 261  | 216  | 319  | 560  | <i>rpoD</i>                            | RNA polymerase sigma factor RpoD                                          |
| NW338_07685 | 163  | 179  | 314  | 432  | 150  | 240  | 210  | 369  | 466   | 341   | 1018  | 1343  | 372  | 335  | 381  | 544  | <i>dnaG</i>                            | DNA primase                                                               |
| NW338_07690 | 105  | 272  | 190  | 106  | 385  | 140  | 149  | 175  | 72    | 130   | 108   | 0     | 308  | 96   | 0    | 232  | .                                      | kinase/pyrophosphorylase                                                  |
| NW338_07695 | 69   | 31   | 0    | 82   | 123  | 137  | 50   | 53   | 84    | 51    | 311   | 279   | 103  | 39   | 0    | 162  | .                                      | helix-turn-helix transcriptional regulator                                |
| NW338_07700 | 213  | 439  | 272  | 324  | 590  | 738  | 623  | 506  | 119   | 217   | 305   | 346   | 798  | 935  | 740  | 752  | .                                      | glycine-tRNA ligase                                                       |
| NW338_07705 | 392  | 772  | 473  | 611  | 136  | 194  | 14   | 239  | 158   | 64    | 112   | 276   | 566  | 462  | 233  | 371  | <i>recO</i>                            | DNA repair protein RecO                                                   |
| NW338_07710 | 764  | 800  | 473  | 559  | 373  | 295  | 103  | 247  | 0     | 18    | 49    | 0     | 131  | 121  | 193  | 96   | <i>era</i>                             | GTPase Era                                                                |
| NW338_07730 | 392  | 303  | 333  | 336  | 204  | 306  | 225  | 242  | 294   | 317   | 156   | 220   | 475  | 0    | 235  | .    | PhoH family protein                    |                                                                           |
| NW338_07735 | 1771 | 2255 | 1725 | 2429 | 1219 | 1097 | 758  | 1326 | 1142  | 820   | 734   | 727   | 2212 | 1185 | 1520 | 1654 | .                                      | iron transporter                                                          |
| NW338_07740 | 1553 | 1606 | 1578 | 1405 | 1534 | 1171 | 1285 | 1663 | 502   | 588   | 824   | 304   | 987  | 933  | 93   | 1078 | <i>floA</i>                            | flotillin-like protein FloA                                               |
| NW338_07745 | 988  | 1564 | 1185 | 2289 | 479  | 723  | 1012 | 670  | 14256 | 10494 | 10562 | 10909 | 6412 | 8742 | 7365 | 7390 | .                                      | serine protease                                                           |
| NW338_07755 | 56   | 288  | 168  | 293  | 598  | 301  | 330  | 496  | 220   | 0     | 0     | 134   | 362  | 122  | 432  | 359  | <i>mtaB</i>                            | tRNA (N(6)-L-threonylcarbamoyladenine(37)-C(2))-methyltransferase MtaB    |
| NW338_07760 | 62   | 110  | 51   | 179  | 191  | 160  | 141  | 298  | 159   | 85    | 170   | 231   | 125  | 86   | 231  | 196  | .                                      | 16S rRNA (uracil(1498)-N(3))-methyltransferase                            |
| NW338_07765 | 576  | 980  | 1095 | 1803 | 1897 | 1685 | 3269 | 4360 | 181   | 114   | 345   | 224   | 1170 | 1517 | 2495 | 1133 | <i>prmA</i>                            | 50S ribosomal protein L11 methyltransferase                               |
| NW338_07770 | 739  | 715  | 1707 | 1916 | 955  | 862  | 1814 | 2444 | 152   | 100   | 309   | 542   | 270  | 776  | 776  | 1198 | <i>dnaJ</i>                            | molecular chaperone DnaJ                                                  |
| NW338_07775 | 2654 | 2393 | 5290 | 5941 | 4469 | 3769 | 7511 | 7646 | 943   | 652   | 2016  | 2662  | 3807 | 4867 | 4365 | 4824 | <i>dnaK</i>                            | molecular chaperone DnaK                                                  |
| NW338_07780 | 2460 | 3525 | 4432 | 6986 | 5268 | 4589 | 6705 | 7195 | 455   | 430   | 2082  | 3159  | 4997 | 4215 | 5314 | 6129 | <i>grpE</i>                            | nucleotide exchange factor GrpE                                           |
| NW338_07785 | 966  | 772  | 1187 | 1751 | 1660 | 2021 | 1996 | 3141 | 180   | 404   | 1542  | 1266  | 2019 | 1496 | 3890 | 2155 | <i>hrcA</i>                            | heat-inducible transcriptional repressor HrcA                             |
| NW338_07790 | 41   | 34   | 34   | 54   | 0    | 24   | 104  | 26   | 47    | 0     | 118   | 22    | 40   | 12   | 0    | 77   | <i>hemW</i>                            | radical SAM family heme chaperone HemW                                    |
| NW338_07795 | 203  | 126  | 82   | 134  | 138  | 142  | 192  | 205  | 66    | 18    | 24    | 114   | 376  | 221  | 184  | 157  | <i>lepA</i>                            | translation elongation factor 4                                           |
| NW338_07800 | 297  | 1352 | 615  | 508  | 822  | 2023 | 2308 | 1448 | 1857  | 2004  | 1700  | 908   | 1284 | 1151 | 0    | 1622 | <i>rpsT</i>                            | 30S ribosomal protein S20                                                 |
| NW338_07805 | 0    | 26   | 0    | 26   | 26   | 6    | 88   | 0    | 124   | 0     | 0     | 141   | 0    | 208  | 0    | 75   | <i>holA</i>                            | DNA polymerase III subunit delta                                          |
| NW338_07810 | 0    | 4    | 0    | 20   | 11   | 19   | 0    | 4    | 53    | 7     | 105   | 79    | 22   | 0    | 0    | 6    | .                                      | DNA internalization-related competence protein                            |
| NW338_07815 | 123  | 62   | 321  | 241  | 254  | 189  | 328  | 451  | 0     | 142   | 0     | 106   | 102  | 29   | 0    | 193  | .                                      | ComEC/Rec2                                                                |
| NW338_07820 | 63   | 14   | 28   | 71   | 0    | 0    | 0    | 14   | 86    | 0     |       |       |      |      |      |      |                                        |                                                                           |

|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |                        |                                                                                            |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------|------------------------|--------------------------------------------------------------------------------------------|
| NW338_07900 | 0    | 92   | 0    | 26   | 0    | 60   | 0    | 47   | 0    | 0    | 0    | 0    | 158  | 30   | 376  | 79          | .                      | acetyl-CoA carboxylase biotin carboxyl carrier protein subunit                             |
| NW338_07905 | 46   | 79   | 97   | 14   | 0    | 42   | 10   | 30   | 58   | 0    | 0    | 0    | 82   | 0    | 0    | 210         | .                      | biotin-dependent carboxyltransferase family protein                                        |
| NW338_07910 | 63   | 95   | 26   | 123  | 230  | 308  | 152  | 170  | 0    | 44   | 0    | 0    | 0    | 37   | 0    | 73          | <i>pxpB</i>            | 5-oxoprolinase subunit PxpB                                                                |
| NW338_07920 | 166  | 291  | 229  | 406  | 372  | 352  | 482  | 880  | 178  | 26   | 284  | 237  | 57   | 126  | 0    | 377         | <i>udk</i>             | uridine kinase                                                                             |
| NW338_07925 | 181  | 166  | 358  | 458  | 80   | 253  | 281  | 550  | 88   | 13   | 66   | 19   | 404  | 342  | 743  | 282         | .                      | U32 family peptidase                                                                       |
| NW338_07930 | 81   | 59   | 151  | 219  | 178  | 82   | 149  | 328  | 0    | 52   | 93   | 55   | 57   | 22   | 0    | 196         | .                      | U32 family peptidase                                                                       |
| NW338_07935 | 0    | 0    | 46   | 0    | 39   | 0    | 32   | 15   | 0    | 0    | 69   | 0    | 0    | 0    | 0    | 83          | .                      | O-methyltransferase                                                                        |
| NW338_07940 | 925  | 1030 | 955  | 887  | 2275 | 1267 | 1365 | 1616 | 1262 | 1297 | 987  | 1826 | 1240 | 640  | 1970 | 1297        | .                      | DUF1292 domain-containing protein                                                          |
| NW338_07945 | 867  | 490  | 641  | 638  | 599  | 558  | 590  | 892  | 0    | 153  | 148  | 188  | 391  | 73   | 464  | 190         | <i>ruvX</i>            | Holliday junction resolvase RuvX                                                           |
| NW338_07955 | 116  | 191  | 129  | 179  | 290  | 293  | 332  | 340  | 23   | 31   | 16   | 9    | 219  | 80   | 35   | 66          | <i>alaS</i>            | alanine--tRNA ligase                                                                       |
| NW338_07960 | 131  | 129  | 168  | 64   | 72   | 76   | 108  | 61   | 64   | 20   | 18   | 29   | 134  | 43   | 0    | 104         | .                      | ATP-dependent RecD-like DNA helicase                                                       |
| NW338_07965 | 43   | 67   | 0    | 72   | 0    | 58   | 0    | 46   | 88   | 0    | 0    | 36   | 0    | 77   | 262  | 0           | .                      | tetratricopeptide repeat protein                                                           |
| NW338_07970 | 314  | 139  | 256  | 363  | 149  | 139  | 332  | 234  | 101  | 87   | 114  | 350  | 205  | 223  | 307  | 254         | <i>mnmA</i>            | tRNA 2-thiouridine(34) synthase MnmA                                                       |
| NW338_07975 | 100  | 192  | 326  | 244  | 111  | 69   | 222  | 178  | 53   | 43   | 75   | 49   | 274  | 189  | 260  | 241         | .                      | cysteine desulfurase                                                                       |
| NW338_07980 | 46   | 56   | 166  | 149  | 133  | 80   | 369  | 292  | 52   | 32   | 189  | 523  | 152  | 223  | 167  | 169         | .                      | LLM class flavin-dependent oxidoreductase                                                  |
| NW338_07990 | 1193 | 628  | 570  | 891  | 1341 | 341  | 469  | 282  | 609  | 1022 | 347  | 749  | 903  | 743  | 0    | 652         | .                      | CsbD family protein                                                                        |
| NW338_07995 | 306  | 721  | 613  | 1140 | 1544 | 1452 | 1558 | 1338 | 286  | 344  | 860  | 1263 | 253  | 289  | 1028 | 884         | .                      | Rrf2 family transcriptional regulator                                                      |
| NW338_08000 | 182  | 240  | 248  | 239  | 541  | 321  | 485  | 386  | 171  | 148  | 552  | 184  | 653  | 174  | 71   | 345         | .                      | replication-associated recombination protein A                                             |
| NW338_08005 | 171  | 54   | 365  | 216  | 131  | 225  | 131  | 254  | 212  | 62   | 355  | 315  | 380  | 192  | 0    | 337         | .                      | tRNA threonylcarbamoyladenosine dehydratase                                                |
| NW338_08020 | 140  | 128  | 180  | 86   | 169  | 210  | 304  | 252  | 128  | 107  | 50   | 74   | 166  | 104  | 342  | 108         | <i>aspS</i>            | aspartate--tRNA ligase                                                                     |
| NW338_08025 | 37   | 35   | 62   | 65   | 20   | 62   | 101  | 47   | 0    | 0    | 58   | 33   | 60   | 0    | 68   | <i>hisS</i> | histidine--tRNA ligase |                                                                                            |
| NW338_08030 | 85   | 298  | 281  | 218  | 283  | 351  | 360  | 231  | 337  | 18   | 96   | 111  | 257  | 136  | 408  | 49          | .                      | N-acetylmuramoyl-L-alanine amidase                                                         |
| NW338_08035 | 356  | 436  | 242  | 497  | 343  | 200  | 91   | 223  | 0    | 0    | 0    | 0    | 0    | 30   | 0    | 0           | <i>ddt</i>             | D-aminoacyl-tRNA deacylase                                                                 |
| NW338_08040 | 188  | 193  | 327  | 370  | 366  | 210  | 411  | 389  | 83   | 41   | 49   | 122  | 171  | 101  | 80   | 29          | .                      | bifunctional (p)ppGpp synthetase/guanosine-3';5'-bis(diphosphate) 3'-pyrophosphohydrolase  |
| NW338_08045 | 89   | 86   | 261  | 445  | 48   | 330  | 352  | 252  | 0    | 301  | 122  | 47   | 69   | 52   | 326  | 34          | .                      | adenine phosphoribosyltransferase                                                          |
| NW338_08050 | 52   | 66   | 48   | 59   | 45   | 60   | 67   | 71   | 0    | 7    | 28   | 46   | 64   | 157  | 0    | 165         | <i>recJ</i>            | single-stranded-DNA-specific exonuclease RecJ                                              |
| NW338_08055 | 141  | 205  | 137  | 251  | 178  | 247  | 118  | 234  | 147  | 107  | 225  | 187  | 239  | 201  | 154  | 169         | <i>secDF</i>           | protein translocase subunit SecDF                                                          |
| NW338_08065 | 75   | 123  | 218  | 266  | 111  | 323  | 189  | 167  | 46   | 80   | 0    | 219  | 487  | 404  | 619  | 504         | <i>tgt</i>             | tRNA guanosine(34) transglycosylase Tgt                                                    |
| NW338_08070 | 213  | 112  | 171  | 308  | 307  | 257  | 350  | 202  | 0    | 0    | 0    | 0    | 325  | 319  | 0    | 178         | <i>queA</i>            | tRNA preQ1(34) 5-adenosylmethionine ribosyltransferase-isomerase QueA                      |
| NW338_08075 | 0    | 127  | 159  | 194  | 193  | 162  | 277  | 345  | 60   | 0    | 42   | 129  | 249  | 255  | 579  | 237         | <i>ruvB</i>            | Holliday junction branch migration DNA helicase RuvB                                       |
| NW338_08080 | 77   | 79   | 81   | 131  | 63   | 183  | 527  | 228  | 0    | 177  | 69   | 84   | 184  | 23   | 152  | 51          | <i>ruvA</i>            | Holliday junction branch migration protein RuvA                                            |
| NW338_08085 | 220  | 56   | 57   | 383  | 370  | 72   | 200  | 341  | 115  | 234  | 0    | 111  | 78   | 141  | 369  | 188         | .                      | ACT domain-containing protein                                                              |
| NW338_08090 | 521  | 409  | 440  | 672  | 900  | 886  | 1350 | 1123 | 225  | 304  | 296  | 644  | 2807 | 3064 | 4199 | 3197        | <i>obgE</i>            | GTPase ObgE                                                                                |
| NW338_08095 | 1757 | 1889 | 2120 | 3762 | 1577 | 1621 | 3042 | 2690 | 3815 | 4913 | 2443 | 3836 | 3225 | 4248 | 4579 | 5323        | <i>rpmA</i>            | 50S ribosomal protein L27                                                                  |
| NW338_08100 | 1103 | 1150 | 457  | 537  | 1902 | 1471 | 1678 | 1574 | 541  | 383  | 399  | 637  | 2375 | 2110 | 5166 | 1444        | .                      | ribosomal-processing cysteine protease Prp                                                 |
| NW338_08105 | 1378 | 1032 | 1293 | 1294 | 2138 | 2050 | 2821 | 3381 | 747  | 156  | 422  | 425  | 3597 | 3157 | 5396 | 3226        | <i>rplU</i>            | 50S ribosomal protein L21                                                                  |
| NW338_08110 | 169  | 18   | 134  | 79   | 0    | 12   | 152  | 84   | 0    | 0    | 0    | 106  | 0    | 26   | 0    | 48          | <i>mreD</i>            | rod shape-determining protein MreD                                                         |
| NW338_08115 | 170  | 42   | 135  | 47   | 75   | 108  | 61   | 173  | 70   | 0    | 52   | 89   | 0    | 0    | 364  | 37          | <i>mreC</i>            | rod shape-determining protein MreC                                                         |
| NW338_08125 | 189  | 181  | 117  | 104  | 81   | 112  | 159  | 129  | 974  | 722  | 1030 | 499  | 150  | 1212 | 551  | 64          | .                      | DUF4930 family protein                                                                     |
| NW338_08135 | 152  | 457  | 456  | 252  | 88   | 43   | 36   | 33   | 184  | 113  | 827  | 263  | 606  | 50   | 620  | 522         | .                      | hypothetical protein                                                                       |
| NW338_08175 | 0    | 0    | 0    | 0    | 0    | 0    | 15   | 0    | 76   | 0    | 0    | 0    | 68   | 0    | 134  | 44          | <i>radC</i>            | DNA repair protein RadC                                                                    |
| NW338_08180 | 0    | 0    | 0    | 33   | 0    | 0    | 0    | 28   | 0    | 0    | 59   | 71   | 61   | 0    | 0    | 0           | .                      | prepilin peptidase                                                                         |
| NW338_08185 | 143  | 170  | 331  | 493  | 355  | 267  | 639  | 694  | 181  | 64   | 253  | 221  | 208  | 126  | 145  | 210         | .                      | bifunctional folyl/polyglutamate synthase/dihydrofolate synthase                           |
| NW338_08190 | 208  | 199  | 524  | 793  | 302  | 358  | 1013 | 1227 | 0    | 53   | 33   | 73   | 150  | 75   | 188  | 131         | .                      | valine--tRNA ligase                                                                        |
| NW338_08195 | 83   | 34   | 87   | 165  | 254  | 411  | 423  | 296  | 397  | 748  | 804  | 1001 | 536  | 280  | 1249 | 234         | .                      | DNA-3-methyladenine glycosylase I                                                          |
| NW338_08200 | 0    | 51   | 139  | 169  | 0    | 64   | 170  | 56   | 104  | 15   | 261  | 94   | 0    | 20   | 0    | 141         | .                      | AbrB family transcriptional regulator                                                      |
| NW338_08210 | 252  | 371  | 388  | 450  | 206  | 216  | 477  | 496  | 187  | 324  | 348  | 252  | 55   | 215  | 0    | 230         | <i>hemL</i>            | glutamate-1-semialdehyde 2,1-aminomutase                                                   |
| NW338_08215 | 227  | 95   | 113  | 266  | 183  | 246  | 302  | 416  | 0    | 16   | 0    | 167  | 114  | 0    | 174  | 57          | <i>hemB</i>            | porphobilinogen synthase                                                                   |
| NW338_08220 | 65   | 48   | 58   | 91   | 1311 | 754  | 831  | 419  | 0    | 24   | 224  | 151  | 793  | 511  | 810  | 433         | .                      | uroporphyrinogen-III synthase                                                              |
| NW338_08225 | 111  | 182  | 677  | 522  | 580  | 286  | 474  | 706  | 0    | 35   | 186  | 105  | 247  | 85   | 0    | 273         | <i>hemC</i>            | hydroxymethylbilane synthase                                                               |
| NW338_08230 | 53   | 117  | 330  | 222  | 113  | 181  | 89   | 199  | 823  | 611  | 1343 | 1823 | 578  | 661  | 1155 | 594         | .                      | cytochrome c biogenesis protein                                                            |
| NW338_08235 | 1197 | 1445 | 1607 | 2154 | 1947 | 1792 | 2472 | 2730 | 428  | 510  | 356  | 558  | 1257 | 1186 | 1260 | 1600        | <i>hemaA</i>           | glutamyl-tRNA reductase                                                                    |
| NW338_08240 | 0    | 0    | 0    | 0    | 0    | 10   | 0    | 40   | 0    | 0    | 0    | 0    | 0    | 23   | 156  | 60          | <i>yihA</i>            | ribosome biogenesis GTP-binding protein YihA/YsxC                                          |
| NW338_08245 | 235  | 237  | 607  | 659  | 213  | 473  | 732  | 939  | 1027 | 508  | 916  | 527  | 1321 | 1233 | 1421 | 1471        | <i>clpX</i>            | ATP-dependent Clp protease ATP-binding subunit ClpX                                        |
| NW338_08250 | 569  | 386  | 899  | 987  | 815  | 753  | 1297 | 1871 | 1488 | 1613 | 1129 | 651  | 653  | 345  | 832  | 1034        | <i>tig</i>             | trigger factor                                                                             |
| NW338_08260 | 50   | 31   | 53   | 12   | 0    | 42   | 11   | 65   | 0    | 0    | 0    | 26   | 38   | 84   | 0    | 0           | .                      | hypothetical protein                                                                       |
| NW338_08265 | 94   | 84   | 220  | 144  | 249  | 268  | 325  | 344  | 0    | 26   | 104  | 40   | 0    | 22   | 0    | 100         | .                      | NUDIX domain-containing protein                                                            |
| NW338_08270 | 80   | 205  | 325  | 843  | 70   | 295  | 58   | 505  | 459  | 782  | 248  | 226  | 399  | 76   | 257  | 338         | <i>rplT</i>            | 50S ribosomal protein L20                                                                  |
| NW338_08275 | 446  | 190  | 193  | 126  | 584  | 166  | 754  | 710  | 586  | 0    | 833  | 858  | 2559 | 2519 | 3944 | 2170        | <i>rpmI</i>            | 50S ribosomal protein L35                                                                  |
| NW338_08280 | 136  | 241  | 332  | 510  | 120  | 374  | 626  | 542  | 0    | 94   | 84   | 0    | 1044 | 869  | 1387 | 837         | <i>infC</i>            | translation initiation factor IF-3                                                         |
| NW338_08285 | 210  | 51   | 115  | 140  | 276  | 170  | 282  | 189  | 35   | 76   | 143  | 87   | 55   | 133  | 0    | 149         | .                      | amino acid permease                                                                        |
| NW338_08290 | 1652 | 1192 | 1019 | 1182 | 1458 | 1418 | 1476 | 1401 | 113  | 100  | 88   | 202  | 429  | 349  | 458  | 745         | <i>thrS</i>            | threonine--tRNA ligase                                                                     |
| NW338_08300 | 765  | 675  | 388  | 320  | 233  | 249  | 370  | 822  | 114  | 17   | 139  | 88   | 511  | 434  | 184  | 192         | <i>dnal</i>            | primosomal protein Dnal                                                                    |
| NW338_08305 | 229  | 284  | 499  | 257  | 134  | 216  | 336  | 401  | 165  | 323  | 258  | 492  | 534  | 266  | 311  | 175         | .                      | replication initiation and membrane attachment family protein                              |
| NW338_08310 | 465  | 419  | 233  | 326  | 387  | 526  | 263  | 475  | 0    | 102  | 94   | 159  | 792  | 434  | 1018 | 1163        | <i>nrdR</i>            | transcriptional regulator NrdR                                                             |
| NW338_08315 | 589  | 326  | 269  | 188  | 172  | 236  | 267  | 168  | 954  | 1275 | 2202 | 1556 | 1264 | 845  | 599  | 1283        | <i>gap</i>             | type I glyceraldehyde-3-phosphate dehydrogenase                                            |
| NW338_08320 | 503  | 781  | 539  | 608  | 289  | 235  | 220  | 272  | 182  | 52   | 71   | 79   | 178  | 126  | 271  | 49          | <i>coaE</i>            | dephospho-CoA kinase                                                                       |
| NW338_08325 | 500  | 178  | 332  | 474  | 165  | 136  | 256  | 385  | 206  | 93   | 240  | 86   | 276  | 78   | 304  | 208         | <i>mutM</i>            | bifunctional DNA-formamidopyrimidine glycosylase/DNA-(apurinic or apyrimidinic site) lyase |
| NW338_08330 | 361  | 178  | 267  | 321  | 136  | 149  | 177  | 256  | 85   | 47   | 49   | 56   | 194  | 200  | 288  | 270         | <i>polA</i>            | DNA polymerase I                                                                           |
| NW338_08335 | 0    | 38   | 50   | 33   | 0    | 0    | 51   | 28   | 40   | 11   | 28   | 0    | 87   | 9    | 0    | 80          | .                      | hypothetical protein                                                                       |
| NW338_08340 | 232  | 140  | 174  | 102  | 147  | 123  | 122  | 47   | 36   | 68   | 230  | 74   | 0    | 30   | 376  | 76          | .                      | ATP-binding protein                                                                        |
| NW338_08345 | 102  | 194  | 82   | 36   | 0    | 76   | 29   | 30   | 413  | 91   | 545  | 35   | 375  | 58   | 0    | 246         | .                      | response regulator transcription factor                                                    |
| NW338_08350 | 542  | 509  | 763  | 692  | 230  | 213  | 354  | 523  | 446  | 282  | 385  | 737  | 618  | 705  | 902  | 728         | <i>icd</i>             | NADP-dependent isocitrate dehydrogenase                                                    |
| NW338_08355 | 364  | 307  | 552  | 538  | 360  | 217  | 196  | 265  | 363  | 344  | 400  | 94   | 673  | 85   | 542  | 520         | .                      | citrate synthase                                                                           |
| NW338_08360 | 502  | 531  | 389  | 294  | 646  | 318  | 327  | 129  | 476  | 401  | 63   | 374  | 174  | 426  | 784  | 393         | .                      | amino acid permease                                                                        |

|               |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |              |                                                                                                                            |
|---------------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|--------------|----------------------------------------------------------------------------------------------------------------------------|
| NW338_08435   | 396  | 791  | 909  | 1357 | 941  | 1389 | 1284 | 1347 | 4627  | 4438 | 4414 | 3750 | 1718 | 809  | 1917 | 1955 | .            | acetate kinase                                                                                                             |
| NW338_08440   | 49   | 44   | 329  | 202  | 40   | 95   | 304  | 72   | 0     | 0    | 160  | 0    | 92   | 15   | 294  | 107  | .            | class I SAM-dependent methyltransferase                                                                                    |
| NW338_08445   | 563  | 386  | 1182 | 873  | 314  | 445  | 896  | 810  | 241   | 32   | 566  | 897  | 0    | 373  | 1035 | 249  | <i>tpx</i>   | thiol peroxidase                                                                                                           |
| NW338_08450   | 0    | 0    | 34   | 24   | 0    | 0    | 0    | 31   | 0     | 0    | 54   | 65   | 0    | 35   | 0    | 111  | .            | TSUP family transporter                                                                                                    |
| NW338_08455   | 61   | 128  | 53   | 84   | 135  | 136  | 107  | 208  | 0     | 0    | 104  | 87   | 220  | 87   | 0    | 95   | <i>thil</i>  | tRNA 4-thiouridine(8) synthase Thil                                                                                        |
| NW338_08460   | 0    | 36   | 17   | 51   | 0    | 23   | 0    | 8    | 0     | 0    | 36   | 70   | 0    | 0    | 0    | 0    | .            | cysteine desulfurase                                                                                                       |
| NW338_08470   | 731  | 721  | 432  | 543  | 569  | 481  | 403  | 432  | 173   | 129  | 180  | 201  | 448  | 479  | 442  | 421  | <i>ezrA</i>  | separation ring formation regulator EzrA                                                                                   |
| NW338_08475   | 340  | 137  | 147  | 405  | 136  | 311  | 555  | 433  | 0     | 175  | 280  | 121  | 380  | 316  | 0    | 418  | .            | GAF domain-containing protein                                                                                              |
| NW338_08480   | 686  | 476  | 760  | 532  | 433  | 465  | 1034 | 737  | 644   | 1152 | 1780 | 2264 | 617  | 283  | 762  | 527  | <i>rpsD</i>  | 30S ribosomal protein S4                                                                                                   |
| NW338_08490   | 0    | 43   | 43   | 167  | 112  | 47   | 23   | 87   | 0     | 72   | 198  | 0    | 80   | 238  | 0    | 0    | .            | OsmC family protein                                                                                                        |
| NW338_08495   | 24   | 30   | 165  | 182  | 33   | 68   | 114  | 317  | 0     | 28   | 0    | 129  | 0    | 0    | 0    | 33   | .            | alanine-glyoxylate aminotransferase family protein                                                                         |
| NW338_08500   | 0    | 46   | 115  | 152  | 212  | 62   | 51   | 298  | 0     | 76   | 0    | 113  | 29   | 0    | 0    | 41   | <i>serA</i>  | phosphoglycerate dehydrogenase                                                                                             |
| NW338_08510   | 0    | 65   | 17   | 90   | 68   | 78   | 9    | 125  | 0     | 44   | 0    | 0    | 105  | 142  | 0    | 27   | .            | HAD family hydrolase                                                                                                       |
| NW338_08515   | 88   | 26   | 46   | 55   | 190  | 94   | 73   | 45   | 0     | 77   | 0    | 144  | 113  | 144  | 231  | 113  | <i>nagE</i>  | N-acetylglucosamine-specific PTS transporter subunit IIBC                                                                  |
| NW338_08520   | 0    | 93   | 31   | 64   | 394  | 107  | 33   | 31   | 0     | 0    | 174  | 39   | 914  | 287  | 286  | 266  | .            | 1-acyl-sn-glycerol-3-phosphate acyltransferase                                                                             |
| NW338_08525   | 507  | 332  | 556  | 248  | 257  | 302  | 212  | 247  | 10101 | 8635 | 8292 | 5458 | 951  | 1188 | 1119 | 645  | .            | trypsin-like peptidase domain-containing protein                                                                           |
| NW338_08530   | 125  | 76   | 36   | 70   | 93   | 100  | 209  | 145  | 47    | 0    | 0    | 89   | 167  | 54   | 195  | 13   | <i>tyrS</i>  | tyrosine-tRNA ligase                                                                                                       |
| NW338_08535   | 51   | 0    | 0    | 0    | 0    | 30   | 11   | 32   | 67    | 0    | 189  | 62   | 131  | 15   | 187  | 84   | .            | penicillin-binding protein                                                                                                 |
| NW338_08545   | 0    | 9    | 0    | 11   | 24   | 8    | 34   | 4    | 0     | 0    | 0    | 0    | 59   | 0    | 0    | 7    | <i>harA</i>  | haptoglobin-binding heme uptake protein HarA                                                                               |
| NW338_08555   | 444  | 294  | 884  | 661  | 648  | 638  | 438  | 627  | 233   | 136  | 335  | 315  | 889  | 578  | 590  | 850  | .            | formate-tetrahydrofolate ligase                                                                                            |
| NW338_08560   | 165  | 196  | 188  | 224  | 83   | 85   | 12   | 61   | 339   | 220  | 201  | 213  | 0    | 31   | 0    | 121  | <i>acsA</i>  | acetate--CoA ligase                                                                                                        |
| NW338_08565   | 191  | 15   | 31   | 48   | 0    | 0    | 0    | 0    | 191   | 194  | 100  | 0    | 0    | 168  | 0    | 155  | .            | GNAT family N-acetyltransferase                                                                                            |
| NW338_08570   | 61   | 25   | 39   | 10   | 21   | 17   | 0    | 0    | 95    | 56   | 164  | 170  | 0    | 24   | 0    | 147  | .            | acetoin utilization protein AcuC                                                                                           |
| NW338_08575   | 415  | 331  | 771  | 559  | 446  | 632  | 784  | 657  | 175   | 239  | 426  | 176  | 1107 | 1036 | 1948 | 1112 | <i>ccpA</i>  | catabolite control protein A                                                                                               |
| NW338_08585   | 42   | 248  | 499  | 415  | 337  | 439  | 252  | 525  | 0     | 270  | 0    | 22   | 169  | 328  | 186  | 149  | .            | bifunctional 3-deoxy-7-phosphoheptulonate synthase/chorismate mutase                                                       |
| NW338_08595   | 426  | 403  | 336  | 337  | 762  | 376  | 212  | 176  | 448   | 204  | 267  | 115  | 255  | 269  | 0    | 210  | .            | hypothetical protein                                                                                                       |
| NW338_08600   | 1918 | 2603 | 1613 | 1342 | 1578 | 975  | 650  | 732  | 5420  | 7128 | 2347 | 2190 | 1745 | 3676 | 4949 | 2561 | .            | DUF948 domain-containing protein                                                                                           |
| NW338_08605   | 226  | 172  | 213  | 293  | 105  | 237  | 301  | 315  | 80    | 62   | 234  | 43   | 452  | 124  | 70   | 423  | <i>murC</i>  | UDP-N-acetylmuramate--L-alanine ligase                                                                                     |
| NW338_08610   | 129  | 143  | 211  | 156  | 76   | 169  | 107  | 159  | 45    | 99   | 63   | 39   | 85   | 73   | 47   | 95   | .            | FtsK/SpoIIIE domain-containing protein                                                                                     |
| NW338_08615   | 95   | 91   | 294  | 155  | 196  | 79   | 230  | 83   | 95    | 25   | 69   | 229  | 79   | 0    | 0    | 21   | .            | DUF4479 domain-containing protein                                                                                          |
| NW338_08620   | 84   | 123  | 90   | 124  | 58   | 43   | 182  | 0    | 0     | 37   | 0    | 87   | 266  | 186  | 464  | 563  | .            | DUF1444 domain-containing protein                                                                                          |
| NW338_08630   | 213  | 508  | 284  | 452  | 230  | 109  | 259  | 225  | 98    | 267  | 41   | 45   | 139  | 137  | 217  | 121  | .            | M42 family metallopeptidase                                                                                                |
| NW338_08635   | 91   | 82   | 405  | 208  | 0    | 299  | 33   | 94   | 740   | 1576 | 142  | 997  | 525  | 259  | 0    | 525  | .            | PepSY domain-containing protein                                                                                            |
| NW338_08640   | 106  | 45   | 151  | 177  | 169  | 47   | 49   | 38   | 132   | 223  | 177  | 271  | 234  | 83   | 354  | 183  | .            | MBL fold metallo-hydrolase                                                                                                 |
| NW338_08645   | 822  | 1314 | 1316 | 1509 | 1337 | 1279 | 798  | 1258 | 358   | 354  | 560  | 270  | 1557 | 704  | 269  | 1093 | <i>trmB</i>  | tRNA (guanosine(46)-N7)-methyltransferase TrmB                                                                             |
| NW338_08650   | 1195 | 1195 | 1305 | 1270 | 1313 | 1084 | 981  | 962  | 444   | 155  | 162  | 343  | 129  | 359  | 166  | 168  | .            | phosphotransferase family protein                                                                                          |
| NW338_08655   | 342  | 390  | 448  | 437  | 1050 | 1247 | 488  | 633  | 133   | 126  | 0    | 0    | 195  | 423  | 421  | 252  | <i>dat</i>   | D-amino-acid transaminase                                                                                                  |
| NW338_08660   | 332  | 221  | 367  | 326  | 914  | 789  | 685  | 368  | 43    | 103  | 75   | 184  | 472  | 212  | 322  | 243  | <i>sapep</i> | Mn(2+)-dependent dipeptidase Sapep                                                                                         |
| NW338_08665   | 389  | 339  | 432  | 445  | 935  | 942  | 1176 | 460  | 139   | 654  | 249  | 443  | 84   | 225  | 217  | 631  | .            | YthH domain-containing protein                                                                                             |
| NW338_08670   | 123  | 256  | 321  | 201  | 169  | 244  | 119  | 102  | 163   | 46   | 215  | 70   | 211  | 132  | 264  | 175  | .            | rRNA pseudouridine synthase                                                                                                |
| NW338_08675   | 116  | 73   | 98   | 120  | 374  | 177  | 111  | 120  | 32    | 29   | 50   | 146  | 1032 | 664  | 1207 | 365  | .            | polysaccharide biosynthesis protein                                                                                        |
| NW338_08680   | 0    | 0    | 0    | 44   | 30   | 15   | 16   | 33   | 48    | 52   | 100  | 0    | 74   | 32   | 0    | 97   | .            | NAD(P)/FAD-dependent oxidoreductase                                                                                        |
| NW338_08685   | 0    | 7    | 21   | 12   | 15   | 10   | 29   | 20   | 0     | 0    | 0    | 0    | 7    | 10   | 0    | 5    | <i>sosC</i>  | LPXTG-anchored repetitive surface protein SasC                                                                             |
| NW338_08695   | 67   | 61   | 98   | 183  | 242  | 232  | 384  | 385  | 25    | 71   | 96   | 74   | 129  | 55   | 288  | 157  | <i>leuS</i>  | leucine-tRNA ligase                                                                                                        |
| NW338_08700   | 39   | 30   | 88   | 82   | 86   | 56   | 86   | 88   | 50    | 14   | 37   | 143  | 194  | 35   | 364  | 248  | .            | MFS transporter                                                                                                            |
| NW338_08705   | 0    | 30   | 61   | 93   | 71   | 6    | 0    | 139  | 0     | 0    | 110  | 208  | 0    | 14   | 0    | 103  | .            | TIGR01212 family radical SAM protein                                                                                       |
| NW338_08710   | 0    | 34   | 0    | 20   | 0    | 48   | 37   | 63   | 104   | 114  | 0    | 276  | 0    | 206  | 308  | 259  | .            | class I SAM-dependent methyltransferase                                                                                    |
| NW338_08715   | 524  | 514  | 854  | 659  | 124  | 770  | 1309 | 790  | 2175  | 2978 | 1083 | 1990 | 2712 | 4765 | 2187 | 3464 | .            | MarR family transcriptional regulator                                                                                      |
| NW338_08725   | 315  | 331  | 109  | 199  | 46   | 293  | 335  | 267  | 937   | 410  | 288  | 376  | 1013 | 3043 | 184  | 1061 | .            | alpha/beta hydrolase                                                                                                       |
| NW338_08735   | 1242 | 1207 | 255  | 584  | 255  | 355  | 31   | 72   | 1017  | 1226 | 610  | 707  | 1013 | 777  | 603  | 958  | .            | proline dehydrogenase                                                                                                      |
| NW338_08740   | 61   | 0    | 42   | 60   | 335  | 456  | 369  | 155  | 0     | 0    | 0    | 269  | 101  | 77   | 0    | 0    | <i>ribE</i>  | 6,7-dimethyl-8-ribityllumazine synthase                                                                                    |
| NW338_08745   | 39   | 13   | 0    | 10   | 142  | 137  | 90   | 77   | 51    | 0    | 0    | 0    | 94   | 168  | 78   | 159  | <i>ribB</i>  | 3,4-dihydroxy-2-butanone-4-phosphate synthase                                                                              |
| NW338_08750   | 45   | 40   | 31   | 0    | 100  | 223  | 160  | 48   | 0     | 0    | 0    | 0    | 0    | 21   | 0    | 0    | .            | riboflavin synthase                                                                                                        |
| NW338_08755   | 0    | 119  | 25   | 13   | 246  | 253  | 301  | 107  | 0     | 15   | 0    | 0    | 211  | 91   | 402  | 140  | <i>ribD</i>  | bifunctional diaminohydroxyphosphoribosylaminopyrimidine deaminase/5-amino-6-(5-phosphoribosylamino)juracil reductase RibD |
| NW338_08760   | 0    | 25   | 20   | 8    | 51   | 18   | 0    | 8    | 0     | 11   | 0    | 91   | 0    | 43   | 0    | 0    | .            | FAD/NAD(P)-binding domain-containing protein                                                                               |
| NW338_08765   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 63   | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .            | metalloregulator ArsR/SmtB family transcription factor                                                                     |
| NW338_08770   | 0    | 0    | 15   | 0    | 0    | 5    | 8    | 0    | 0     | 0    | 70   | 0    | 19   | 0    | 79   | 0    | <i>arsB</i>  | arsenite efflux transporter membrane subunit ArsB                                                                          |
| NW338_08775   | 152  | 178  | 216  | 374  | 265  | 165  | 268  | 187  | 445   | 189  | 175  | 276  | 229  | 750  | 225  | 277  | .            | N-acetylglucosaminidase                                                                                                    |
| NW338_08780   | 127  | 0    | 434  | 277  | 0    | 94   | 92   | 94   | 0     | 71   | 197  | 0    | 0    | 60   | 409  | 192  | .            | hypothetical protein                                                                                                       |
| NW338_08785   | 0    | 34   | 63   | 0    | 0    | 0    | 0    | 107  | 0     | 0    | 89   | 52   | 200  | 0    | 728  | 143  | <i>sigS</i>  | RNA polymerase sigma factor SigS                                                                                           |
| NW338_08790   | 0    | 64   | 44   | 31   | 0    | 42   | 0    | 146  | 132   | 147  | 0    | 169  | 478  | 219  | 414  | 618  | .            | competence protein ComK                                                                                                    |
| NW338_08795   | 0    | 36   | 44   | 88   | 0    | 42   | 217  | 135  | 0     | 0    | 100  | 55   | 106  | 270  | 381  | 97   | .            | hypothetical protein                                                                                                       |
| NW338_08800   | 0    | 30   | 0    | 22   | 0    | 204  | 33   | 19   | 0     | 52   | 0    | 181  | 0    | 102  | 289  | 0    | <i>sdpA</i>  | CPBP family intramembrane metalloprotease SdpA                                                                             |
| NW338_08810   | 143  | 0    | 0    | 152  | 0    | 88   | 0    | 31   | 0     | 106  | 0    | 241  | 0    | 0    | 303  | 307  | .            | hypothetical protein                                                                                                       |
| NW338_08830   | 335  | 153  | 542  | 329  | 166  | 101  | 165  | 185  | 73    | 109  | 229  | 58   | 43   | 33   | 0    | 67   | .            | aldo/keto reductase                                                                                                        |
| NW338_08835   | 102  | 154  | 153  | 158  | 209  | 446  | 378  | 423  | 321   | 194  | 424  | 82   | 39   | 173  | 202  | 162  | .            | NERD domain-containing protein                                                                                             |
| NW338_08840   | 39   | 110  | 160  | 156  | 342  | 524  | 534  | 530  | 245   | 67   | 70   | 174  | 380  | 168  | 404  | 260  | <i>metK</i>  | methionine adenosyltransferase                                                                                             |
| NW338_08845   | 383  | 494  | 334  | 282  | 378  | 314  | 181  | 119  | 992   | 939  | 597  | 352  | 909  | 845  | 844  | 1010 | <i>pckA</i>  | phosphoenolpyruvate carboxykinase (ATP)                                                                                    |
| NW338_08850   | 62   | 90   | 35   | 0    | 231  | 0    | 196  | 112  | 0     | 154  | 59   | 0    | 0    | 302  | 0    | 24   | .            | prolyl oligopeptidase family serine peptidase                                                                              |
| NW338_08855   | 91   | 20   | 0    | 0    | 0    | 0    | 0    | 20   | 0     | 34   | 0    | 106  | 0    | 0    | 0    | 0    | <i>ytkD</i>  | nucleoside triphosphatase YtkD                                                                                             |
| NW338_08860   | 0    | 37   | 425  | 307  | 97   | 153  | 40   | 214  | 1537  | 663  | 1229 | 1431 | 138  | 729  | 656  | 1972 | <i>yidD</i>  | membrane protein insertion efficiency factor YidD                                                                          |
| NW338_08865   | 43   | 29   | 0    | 0    | 92   | 51   | 21   | 41   | 52    | 97   | 63   | 350  | 35   | 51   | 0    | 115  | <i>menC</i>  | o-succinylbenzoate synthase                                                                                                |
| NW338_08870   | 19   | 64   | 68   | 55   | 0    | 67   | 14   | 8    | 35    | 11   | 28   | 0    | 67   | 10   | 0    | 98   | <i>menE</i>  | o-succinylbenzoate--CoA ligase                                                                                             |
| NW338_08875   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0     | 0    | 0    | 0    | 97   | 106  | 0    | 0    | .            | DUF4909 domain-containing protein                                                                                          |
| NW338_08880   | 110  | 78   | 59   | 114  | 97   | 115  | 32   | 14   | 441   | 125  | 132  | 192  | 487  | 610  | 149  | 676  | .            | excalibur calcium-binding domain-containing protein                                                                        |
| NW338_08885   | 122  | 214  | 221  | 242  | 63   | 172  | 0    | 21   | 345   | 271  | 430  | 286  | 403  | 333  | 185  | 143  | .            | DUF4352 domain-containing protein                                                                                          |
| NW338_08890   | 0    | 0    | 0    | 0    | 0    | 20   | 0    | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .            | hypothetical protein                                                                                                       |
| NW338_08895   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 34   | 0     | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .            | DUF3969 family protein                                                                                                     |
| NW338_08900</ |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |      |              |                                                                                                                            |

|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              |                                                                                                   |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------|--------------|---------------------------------------------------------------------------------------------------|
| NW338_09175 | 1369 | 977  | 1535 | 1251 | 1384 | 1279 | 1435 | 1029 | 4466 | 1867 | 2840 | 2825 | 2421 | 1762 | 3010 | 1917        | .            | YlbF/YmcA family competence regulator                                                             |
| NW338_09180 | 0    | 0    | 0    | 10   | 0    | 19   | 0    | 28   | 0    | 0    | 39   | 0    | 0    | 0    | 0    | 0           | .            | DUF445 family protein                                                                             |
| NW338_09185 | 0    | 0    | 0    | 25   | 82   | 0    | 22   | 46   | 130  | 230  | 185  | 351  | 202  | 346  | 0    | 82          | .            | helix-turn-helix transcriptional regulator                                                        |
| NW338_09190 | 0    | 15   | 0    | 63   | 40   | 44   | 16   | 126  | 0    | 26   | 142  | 120  | 190  | 214  | 0    | 222         | .            | response regulator transcription factor                                                           |
| NW338_09195 | 0    | 0    | 35   | 35   | 0    | 17   | 9    | 43   | 0    | 0    | 0    | 0    | 0    | 285  | 206  | 36          | .            | GAF domain-containing sensor histidine kinase                                                     |
| NW338_09200 | 53   | 120  | 114  | 65   | 77   | 130  | 25   | 146  | 201  | 169  | 131  | 91   | 357  | 33   | 112  | 111         | .            | RluA family pseudouridine synthase                                                                |
| NW338_09205 | 33   | 108  | 19   | 111  | 185  | 260  | 245  | 188  | 253  | 543  | 465  | 403  | 347  | 270  | 214  | 150         | <i>fumC</i>  | class II fumarate hydratase                                                                       |
| NW338_09210 | 0    | 0    | 49   | 29   | 63   | 31   | 52   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | .            | hypothetical protein                                                                              |
| NW338_09220 | 1223 | 913  | 423  | 712  | 1050 | 539  | 178  | 360  | 563  | 503  | 148  | 406  | 461  | 731  | 153  | 468         | .            | glucosamine-6-phosphate isomerase                                                                 |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              | tRNA (uridine(34)/cytosine(34)/5-carboxymethylaminomethyluridine(34)-2'-O)-methyltransferase TrmL |
| NW338_09225 | 0    | 81   | 0    | 54   | 0    | 13   | 22   | 153  | 129  | 295  | 94   | 279  | 0    | 30   | 0    | 0           | <i>trmL</i>  | trmL                                                                                              |
| NW338_09230 | 41   | 42   | 128  | 55   | 104  | 38   | 175  | 71   | 0    | 28   | 37   | 43   | 63   | 45   | 81   | 61          | <i>queG</i>  | tRNA epoxycytosine(34) reductase QueG                                                             |
| NW338_09235 | 0    | 61   | 72   | 64   | 162  | 144  | 212  | 241  | 73   | 44   | 61   | 205  | 0    | 19   | 0    | 0           | .            | amino acid ABC transporter ATP-binding protein                                                    |
| NW338_09240 | 0    | 0    | 34   | 29   | 104  | 147  | 91   | 148  | 0    | 34   | 43   | 0    | 30   | 0    | 0    | 11          | .            | ABC transporter permease subunit                                                                  |
| NW338_09245 | 44   | 0    | 46   | 13   | 0    | 39   | 135  | 40   | 0    | 0    | 0    | 118  | 156  | 100  | 0    | 277         | .            | PTS transporter subunit IIC                                                                       |
| NW338_09405 | 1982 | 1683 | 1767 | 2049 | 1303 | 1906 | 2021 | 2171 | 5091 | 5134 | 5672 | 3763 | 3567 | 4501 | 3535 | 4651        | <i>perR</i>  | peroxide-responsive transcriptional repressor PerR                                                |
| NW338_09410 | 127  | 110  | 99   | 185  | 137  | 49   | 155  | 144  | 55   | 129  | 88   | 0    | 37   | 237  | 279  | 154         | .            | phosphoglycerate dehydrogenase                                                                    |
| NW338_09415 | 157  | 35   | 269  | 291  | 396  | 85   | 453  | 62   | 0    | 35   | 0    | 53   | 103  | 60   | 0    | 217         | <i>bcp</i>   | thioredoxin-dependent thiol peroxidase                                                            |
| NW338_09420 | 67   | 106  | 145  | 25   | 82   | 101  | 87   | 144  | 81   | 121  | 101  | 58   | 55   | 71   | 71   | 163         | .            | glutamate-1-semialdehyde 2,1-aminomutase                                                          |
| NW338_09425 | 39   | 125  | 92   | 66   | 128  | 102  | 88   | 56   | 48   | 15   | 98   | 180  | 134  | 250  | 84   | 16          | .            | aromatic acid exporter family protein                                                             |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              |                                                                                                   |
| NW338_09435 | 0    | 27   | 90   | 85   | 14   | 51   | 175  | 227  | 35   | 0    | 75   | 72   | 20   | 61   | 150  | 81          | .            | SAV1866 family putative multidrug efflux ABC transporter                                          |
| NW338_09440 | 0    | 35   | 226  | 145  | 116  | 221  | 171  | 245  | 0    | 0    | 77   | 104  | 283  | 170  | 0    | 272         | .            | DUF402 domain-containing protein                                                                  |
| NW338_09445 | 0    | 43   | 19   | 43   | 74   | 20   | 58   | 11   | 0    | 87   | 0    | 0    | 0    | 0    | 0    | 0           | <i>mutY</i>  | A/G-specific adenine glycosylase                                                                  |
| NW338_09450 | 358  | 583  | 419  | 331  | 259  | 418  | 178  | 309  | 487  | 605  | 730  | 401  | 463  | 255  | 722  | 599         | .            | metal-dependent hydrolase                                                                         |
| NW338_09455 | 0    | 57   | 35   | 84   | 0    | 22   | 0    | 0    | 19   | 0    | 0    | 0    | 42   | 94   | 0    | 108         | .            | hypothetical protein                                                                              |
| NW338_09460 | 78   | 44   | 75   | 12   | 33   | 57   | 14   | 47   | 80   | 81   | 28   | 0    | 98   | 11   | 221  | 65          | .            | ABC transporter ATP-binding protein                                                               |
| NW338_09465 | 137  | 232  | 61   | 104  | 214  | 39   | 33   | 30   | 167  | 0    | 0    | 0    | 149  | 43   | 0    | 0           | .            | YfhH family protein                                                                               |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              |                                                                                                   |
| NW338_09475 | 106  | 59   | 84   | 129  | 197  | 40   | 0    | 38   | 509  | 546  | 526  | 30   | 639  | 730  | 776  | 379         | <i>sgtB</i>  | monofunctional peptidoglycan glycosyltransferase SgtB                                             |
| NW338_09480 | 368  | 444  | 332  | 198  | 253  | 360  | 528  | 348  | 960  | 1349 | 970  | 1134 | 605  | 616  | 534  | 555         | .            | type 1 glutamine amidotransferase                                                                 |
| NW338_09485 | 286  | 176  | 119  | 71   | 416  | 592  | 127  | 0    | 0    | 0    | 0    | 348  | 220  | 0    | 0    | 157         | .            | SE1561 family protein                                                                             |
| NW338_09490 | 25   | 61   | 84   | 26   | 43   | 11   | 79   | 54   | 0    | 14   | 92   | 120  | 255  | 140  | 302  | 159         | <i>yfkAB</i> | radical SAM/CxxC motif protein YfkAB                                                              |
| NW338_09495 | 54   | 114  | 196  | 171  | 390  | 592  | 136  | 339  | 0    | 214  | 79   | 0    | 0    | 476  | 319  | 508         | .            | acyl-CoA thioesterase                                                                             |
| NW338_09500 | 176  | 187  | 65   | 161  | 688  | 371  | 313  | 316  | 177  | 85   | 0    | 64   | 301  | 213  | 422  | 156         | .            | aminopeptidase                                                                                    |
| NW338_09505 | 215  | 95   | 147  | 0    | 0    | 31   | 51   | 47   | 0    | 0    | 0    | 0    | 0    | 579  | 0    | 86          | .            | DUF1128 family protein                                                                            |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              | low molecular weight phosphotyrosine protein                                                      |
| NW338_09510 | 662  | 179  | 169  | 275  | 615  | 345  | 130  | 228  | 253  | 620  | 185  | 295  | 696  | 1052 | 769  | 612         | .            | phosphatase                                                                                       |
| NW338_09515 | 1065 | 783  | 201  | 286  | 181  | 354  | 75   | 235  | 2457 | 944  | 1006 | 1810 | 1554 | 1346 | 1260 | 1152        | .            | YbhH domain-containing protein                                                                    |
| NW338_09520 | 252  | 107  | 139  | 61   | 158  | 168  | 85   | 62   | 189  | 342  | 486  | 552  | 363  | 448  | 218  | 211         | .            | YihY/virulence factor BrkB family protein                                                         |
| NW338_09525 | 755  | 384  | 297  | 373  | 0    | 318  | 634  | 345  | 1027 | 488  | 955  | 295  | 394  | 314  | 561  | 186         | <i>vraR</i>  | two-component system response regulator VraR                                                      |
| NW338_09530 | 172  | 156  | 25   | 198  | 84   | 121  | 49   | 88   | 166  | 196  | 162  | 167  | 147  | 190  | 0    | 193         | .            | sensor histidine kinase                                                                           |
| NW338_09535 | 62   | 95   | 64   | 66   | 0    | 77   | 118  | 30   | 660  | 304  | 581  | 704  | 276  | 151  | 131  | 132         | <i>liaF</i>  | cell wall-active antibiotics response protein LiaF                                                |
| NW338_09540 | 120  | 0    | 319  | 114  | 0    | 32   | 27   | 73   | 0    | 235  | 393  | 402  | 0    | 433  | 0    | 92          | .            | hypothetical protein                                                                              |
| NW338_09545 | 61   | 265  | 207  | 263  | 466  | 156  | 200  | 39   | 680  | 452  | 224  | 526  | 171  | 161  | 904  | 137         | <i>map</i>   | type I methionyl aminopeptidase                                                                   |
| NW338_09550 | 0    | 39   | 0    | 31   | 0    | 21   | 77   | 20   | 0    | 16   | 0    | 49   | 48   | 66   | 0    | 124         | .            | aromatic acid exporter family protein                                                             |
| NW338_09555 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 426  | 0    | 0    | 0    | 0    | 0    | 0    | 0           | .            | hypothetical protein                                                                              |
| NW338_09565 | 39   | 35   | 102  | 204  | 247  | 70   | 738  | 269  | 0    | 213  | 201  | 0    | 210  | 290  | 126  | 111         | .            | type 1 glutamine amidotransferase                                                                 |
| NW338_09570 | 174  | 36   | 97   | 150  | 199  | 203  | 97   | 142  | 85   | 38   | 101  | 86   | 63   | 80   | 386  | 320         | <i>murT</i>  | lipid II isoglutaminyl synthase subunit MurT                                                      |
| NW338_09575 | 1083 | 896  | 1797 | 751  | 1314 | 992  | 1339 | 1862 | 117  | 1019 | 3145 | 3472 | 939  | 852  | 2663 | 1910        | <i>ftnA</i>  | H-type ferritin FtnA                                                                              |
| NW338_09590 | 314  | 223  | 375  | 316  | 275  | 144  | 289  | 200  | 204  | 229  | 557  | 329  | 285  | 517  | 1558 | 581         | <i>dinB</i>  | DNA polymerase IV                                                                                 |
| NW338_09595 | 54   | 0    | 128  | 154  | 144  | 23   | 191  | 135  | 435  | 461  | 356  | 92   | 311  | 276  | 327  | 496         | .            | DUF3267 domain-containing protein                                                                 |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              |                                                                                                   |
| NW338_09600 | 34   | 42   | 50   | 97   | 46   | 126  | 101  | 88   | 126  | 78   | 63   | 114  | 82   | 58   | 192  | 72          | <i>rlmD</i>  | 23S rRNA (uracil(1939)-C(5))-methyltransferase RlmD                                               |
| NW338_09605 | 170  | 191  | 297  | 291  | 164  | 323  | 85   | 373  | 423  | 199  | 269  | 283  | 212  | 516  | 739  | 270         | .            | diacylglycerol kinase                                                                             |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              | Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase subunit                                              |
| NW338_09615 | 390  | 263  | 443  | 390  | 609  | 1064 | 955  | 932  | 245  | 80   | 192  | 214  | 626  | 342  | 305  | 429         | <i>gatB</i>  | GatB                                                                                              |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              | Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase subunit                                              |
| NW338_09620 | 100  | 151  | 89   | 116  | 147  | 309  | 479  | 249  | 155  | 123  | 43   | 72   | 307  | 171  | 119  | 214         | <i>gatA</i>  | GatA                                                                                              |
|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |             |              | Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase subunit                                              |
| NW338_09625 | 153  | 0    | 64   | 91   | 82   | 467  | 102  | 0    | 0    | 0    | 161  | 0    | 45   | 0    | 117  | <i>gatC</i> | GatC         |                                                                                                   |
| NW338_09630 | 197  | 128  | 139  | 148  | 110  | 228  | 86   | 167  | 116  | 90   | 41   | 100  | 470  | 337  | 179  | 493         | <i>putP</i>  | sodium/proline symporter PutP                                                                     |
| NW338_09640 | 43   | 95   | 123  | 109  | 109  | 80   | 300  | 98   | 0    | 8    | 21   | 40   | 55   | 152  | 92   | 37          | <i>ligA</i>  | NAD-dependent DNA ligase LigA                                                                     |
| NW338_09645 | 78   | 71   | 75   | 123  | 94   | 41   | 142  | 173  | 0    | 7    | 39   | 45   | 0    | 6    | 0    | 77          | <i>pcrA</i>  | DNA helicase PcrA                                                                                 |
| NW338_09650 | 67   | 28   | 140  | 128  | 91   | 56   | 74   | 163  | 163  | 23   | 0    | 0    | 119  | 59   | 0    | 51          | .            | heptaprenylglyceryl phosphate synthase                                                            |
| NW338_09655 | 143  | 210  | 557  | 216  | 544  | 344  | 807  | 334  | 1329 | 1989 | 1331 | 508  | 1675 | 1002 | 2665 | 1739        | .            | YerC/YecD family TrpR-related protein                                                             |
| NW338_09660 | 149  | 101  | 55   | 59   | 98   | 212  | 133  | 151  | 0    | 12   | 66   | 38   | 109  | 0    | 134  | 150         | <i>purB</i>  | adenylosuccinate lyase                                                                            |
| NW338_09665 | 49   | 0    | 17   | 12   | 195  | 56   | 60   | 68   | 0    | 14   | 0    | 21   | 95   | 12   | 0    | 15          | <i>scpA</i>  | cysteine protease staphopain A                                                                    |
| NW338_09670 | 0    | 87   | 79   | 35   | 0    | 189  | 0    | 58   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0           | .            | staphostatin A                                                                                    |
| NW338_09675 | 0    | 256  | 0    | 254  | 387  | 106  | 178  | 237  | 0    | 0    | 365  | 0    | 0    | 78   | 0    | 0           | .            | NET1 motif-containing protein                                                                     |
| NW338_09680 | 166  | 344  | 419  | 226  | 277  | 263  | 168  | 217  | 0    | 0    | 210  | 187  | 312  | 215  | 288  | 285         | .            | DUF2179 domain-containing protein                                                                 |
| NW338_09685 | 449  | 310  | 256  | 181  | 696  | 419  | 323  | 289  | 64   | 110  | 51   | 0    | 0    | 112  | 0    | 266         | <i>nadE</i>  | ammonia-dependent NAD(+) synthetase                                                               |
| NW338_09690 | 98   | 225  | 97   | 126  | 124  | 92   | 144  | 86   | 41   | 0    | 0    | 111  | 288  | 37   | 0    | 91          | .            | nicotinate phosphoribosyltransferase                                                              |
| NW338_09695 | 192  | 174  | 313  | 114  | 23   | 292  | 19   | 54   | 113  | 145  | 0    | 332  | 77   | 99   | 0    | 101         | .            | nitric oxide synthase oxygenase                                                                   |
| NW338_09700 | 351  | 164  | 258  | 44   | 133  | 117  | 89   | 53   | 76   | 121  | 188  | 31   | 0    | 349  | 0    | 291         | .            | prephenate dehydratase                                                                            |
| NW338_09715 | 0    | 0    | 50   | 28   | 35   | 55   | 9    | 11   | 48   | 0    | 0    | 89   | 43   | 25   | 0    | 16          | .            | pectate lyase                                                                                     |
| NW338_09720 | 235  | 477  | 307  | 461  | 841  | 832  | 886  | 926  | 198  | 262  | 192  | 388  | 1036 | 585  | 1413 | 751         | .            | cysteine hydrolase                                                                                |
| NW338_09725 | 1393 | 798  | 1029 | 1009 | 1347 | 1209 | 1210 | 1567 | 1972 | 1679 | 1797 | 1650 | 2521 | 2518 | 2432 | 1714        | .            | manganese-dependent inorganic pyrophosphatase                                                     |
| NW338_09735 | 270  | 212  | 207  | 326  | 294  | 160  | 209  | 139  | 254  | 106  | 64   | 172  | 230  | 245  | 259  | 289         | .            | aldehyde dehydrogenase                                                                            |
| NW338_09740 | 199  | 157  | 73   | 72   | 175  | 138  | 237  | 85   | 175  | 119  | 62   | 197  | 172  | 318  | 164  | 76          | .            | lactonase family protein                                                                          |
| NW338_09745 | 0    | 24   | 48   | 0    | 0    | 0    | 150  | 23   | 301  | 831  | 574  | 527  | 776  | 229  | 0    | 385         | .            | YolD-like family protein                                                                          |
| NW338_09755 | 745  | 1921 | 838  | 990  | 220  | 71   | 178  |      |      |      |      |      |      |      |      |             |              |                                                                                                   |

|             |       |       |       |       |       |       |      |      |       |       |       |       |      |       |      |      |              |                                                       |
|-------------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|------|-------|------|------|--------------|-------------------------------------------------------|
| NW338_09835 | 115   | 150   | 132   | 394   | 43    | 51    | 176  | 159  | 311   | 441   | 475   | 710   | 222  | 116   | 253  | 107  | <i>eap</i>   | extracellular adherence protein Eap/Map               |
| NW338_09840 | 218   | 48    | 247   | 637   | 0     | 0     | 0    | 0    | 234   | 0     | 343   | 291   | 0    | 0     | 0    | 0    | .            | hypothetical protein                                  |
| NW338_09845 | 0     | 195   | 107   | 64    | 0     | 113   | 0    | 0    | 0     | 0     | 232   | 0     | 0    | 285   | 0    | 99   | .            | hypothetical protein                                  |
| NW338_09850 | 0     | 0     | 0     | 53    | 0     | 0     | 40   | 0    | 0     | 0     | 0     | 0     | 431  | 1250  | 0    | 66   | .            | hypothetical protein                                  |
| NW338_09855 | 1568  | 3356  | 2100  | 2995  | 695   | 1338  | 235  | 490  | 2295  | 1842  | 3296  | 3204  | 7084 | 10169 | 9437 | 7433 | <i>scn</i>   | complement inhibitor SCIN-A                           |
| NW338_09865 | 246   | 252   | 272   | 109   | 289   | 483   | 105  | 38   | 107   | 0     | 0     | 0     | 0    | 209   | 344  | 199  | <i>sak</i>   | staphylokinase                                        |
| NW338_09870 | 57    | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 150   | 185   | 391   | 424   | 475  | 122   | 345  | 434  | .            | CHAP domain-containing protein                        |
| NW338_09875 | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 238   | 194   | 0     | 0     | 436  | 201   | 682  | 0    | .            | phage holin                                           |
| NW338_09890 | 0     | 102   | 209   | 149   | 0     | 16    | 0    | 0    | 0     | 0     | 0     | 265   | 0    | 209   | 490  | 47   | .            | hypothetical protein                                  |
| NW338_09895 | 0     | 111   | 0     | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0    | .            | hypothetical protein                                  |
| NW338_09905 | 20    | 15    | 15    | 4     | 7     | 12    | 8    | 8    | 0     | 0     | 11    | 0     | 0    | 11    | 45   | 27   | .            | hypothetical protein                                  |
| NW338_09910 | 31    | 0     | 0     | 0     | 0     | 4     | 51   | 6    | 76    | 94    | 73    | 88    | 0    | 0     | 0    | 0    | .            | phage tail family protein                             |
| NW338_09915 | 28    | 28    | 29    | 28    | 5     | 15    | 0    | 24   | 86    | 150   | 28    | 107   | 0    | 0     | 0    | 0    | .            | phage tail tape measure protein                       |
| NW338_10060 | 0     | 39    | 0     | 0     | 100   | 0     | 0    | 0    | 432   | 198   | 0     | 232   | 0    | 56    | 0    | 0    | .            | phi PVL orf 51-like protein                           |
| NW338_10065 | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 26   | 0     | 89    | 123   | 0     | 0    | 0     | 0    | 0    | .            | hypothetical protein                                  |
| NW338_10080 | 32    | 64    | 22    | 21    | 0     | 0     | 0    | 0    | 0     | 18    | 0     | 57    | 0    | 0     | 0    | 0    | .            | DnaD domain-containing protein                        |
| NW338_10085 | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 118  | 111   | 0     | 0     | 120   | 0    | 0     | 0    | 0    | <i>ssb</i>   | single-stranded DNA-binding protein                   |
| NW338_10105 | 0     | 36    | 0     | 0     | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 213   | 0    | 0     | 0    | 0    | .            | hypothetical protein                                  |
| NW338_10110 | 0     | 98    | 0     | 53    | 0     | 0     | 0    | 0    | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0    | .            | DUF1108 family protein                                |
| NW338_10115 | 0     | 98    | 0     | 202   | 0     | 0     | 0    | 73   | 5956  | 3629  | 4342  | 4444  | 0    | 0     | 0    | 110  | .            | DUF1270 domain-containing protein                     |
| NW338_10190 | 992   | 2188  | 1266  | 1361  | 584   | 423   | 51   | 312  | 279   | 169   | 192   | 103   | 268  | 235   | 679  | 84   | <i>lukG</i>  | bi-component leukocidin LukGH subunit G               |
| NW338_10195 | 677   | 742   | 885   | 926   | 407   | 162   | 19   | 112  | 0     | 47    | 0     | 69    | 418  | 516   | 496  | 439  | <i>lukH</i>  | bi-component leukocidin LukGH subunit H               |
| NW338_10215 | 0     | 36    | 29    | 32    | 0     | 32    | 16   | 22   | 0     | 12    | 82    | 80    | 0    | 21    | 133  | 94   | .            | TrkH family potassium uptake protein                  |
| NW338_10220 | 674   | 658   | 2931  | 3821  | 1292  | 1214  | 3993 | 5247 | 606   | 466   | 1653  | 2022  | 2284 | 2707  | 3257 | 2443 | <i>groL</i>  | chaperonin GroEL                                      |
| NW338_10225 | 363   | 336   | 2285  | 3299  | 970   | 683   | 3635 | 4876 | 0     | 169   | 311   | 434   | 1345 | 1909  | 968  | 1479 | <i>groES</i> | co-chaperone GroES                                    |
| NW338_10230 | 62    | 205   | 223   | 63    | 0     | 81    | 115  | 43   | 1239  | 765   | 569   | 269   | 207  | 413   | 0    | 315  | <i>mroQ</i>  | CPBP family intramembrane metalloprotease MroQ        |
| NW338_10235 | 105   | 152   | 157   | 195   | 328   | 425   | 295  | 330  | 270   | 147   | 36    | 304   | 282  | 818   | 560  | 429  | .            | SdrH family protein                                   |
| NW338_10240 | 114   | 482   | 622   | 1462  | 107   | 20    | 628  | 818  | 84    | 77    | 408   | 319   | 0    | 0     | 0    | 156  | .            | nitroreductase family protein                         |
| NW338_10245 | 0     | 37    | 70    | 151   | 64    | 76    | 39   | 90   | 217   | 447   | 688   | 1178  | 0    | 65    | 234  | 188  | .            | carbon-nitrogen family hydrolase                      |
| NW338_10250 | 41111 | 31920 | 23673 | 26319 | 15995 | 20542 | 9066 | 8646 | 25650 | 29837 | 41757 | 39822 | 0    | 0     | 1254 | 0    | .            | delta-lysin family phenol-soluble modulins            |
| NW338_10260 | 331   | 169   | 54    | 138   | 67    | 0     | 0    | 0    | 794   | 225   | 1438  | 766   | 0    | 284   | 0    | 47   | .            | cystatin-like fold lipoprotein                        |
| NW338_10325 | 7047  | 5738  | 3093  | 2931  | 485   | 506   | 513  | 202  | 7733  | 5066  | 6814  | 4499  | 125  | 204   | 0    | 67   | .            | accessory gene regulator AgrB                         |
| NW338_10330 | 7906  | 7156  | 3663  | 4522  | 354   | 1007  | 1110 | 543  | 430   | 910   | 2461  | 1742  | 0    | 0     | 0    | 126  | .            | cyclic lactone autoinducer peptide                    |
| NW338_10340 | 10504 | 12917 | 5315  | 7313  | 2617  | 2911  | 1250 | 1667 | 7806  | 5114  | 6167  | 5386  | 270  | 243   | 128  | 197  | .            | LytTR family DNA-binding domain-containing protein    |
| NW338_10350 | 156   | 123   | 142   | 262   | 130   | 47    | 500  | 141  | 123   | 51    | 136   | 127   | 221  | 138   | 176  | 119  | .            | carbohydrate kinase                                   |
| NW338_10355 | 155   | 197   | 270   | 238   | 17    | 93    | 49   | 164  | 35    | 22    | 56    | 54    | 32   | 82    | 82   | 338  | .            | sucrose-6-phosphate hydrolase                         |
| NW338_10360 | 0     | 0     | 27    | 39    | 0     | 44    | 22   | 42   | 55    | 17    | 0     | 26    | 0    | 194   | 0    | 13   | .            | LacI family DNA-binding transcriptional regulator     |
| NW338_10365 | 0     | 15    | 24    | 11    | 0     | 0     | 8    | 15   | 48    | 0     | 0     | 0     | 0    | 11    | 0    | 54   | .            | ammonium transporter                                  |
| NW338_10370 | 0     | 113   | 0     | 113   | 0     | 0     | 336  | 193  | 0     | 0     | 0     | 108   | 158  | 60    | 0    | 57   | .            | sulfurtransferase TsaA family protein                 |
| NW338_10375 | 0     | 9     | 63    | 67    | 0     | 6     | 38   | 97   | 54    | 0     | 0     | 0     | 0    | 73    | 170  | 104  | .            | YeeE/YedE family protein                              |
| NW338_10380 | 275   | 170   | 260   | 438   | 139   | 309   | 1168 | 661  | 268   | 50    | 166   | 38    | 511  | 21    | 411  | 188  | .            | redox-sensing transcriptional repressor Rex           |
| NW338_10385 | 15    | 18    | 15    | 22    | 0     | 27    | 37   | 17   | 0     | 73    | 0     | 13    | 58   | 124   | 48   | 91   | <i>abcF</i>  | ABC-F type ribosomal protection protein               |
| NW338_10400 | 70    | 118   | 120   | 222   | 114   | 79    | 134  | 240  | 51    | 152   | 0     | 79    | 0    | 113   | 0    | 158  | <i>tsaD</i>  | tRNA (adenosine(37)-N6)-threonylcarbamoyltransferase  |
| NW338_10405 | 0     | 0     | 63    | 25    | 0     | 70    | 44   | 117  | 0     | 0     | 0     | 52    | 101  | 0     | 0    | 27   | <i>rimI</i>  | complex transferase subunit TsaD                      |
| NW338_10410 | 0     | 14    | 132   | 17    | 153   | 89    | 62   | 58   | 0     | 0     | 0     | 0     | 168  | 41    | 139  | 0    | <i>tsaB</i>  | ribosomal protein S18-alanine N-acetyltransferase     |
| NW338_10415 | 0     | 0     | 42    | 0     | 54    | 128   | 22   | 110  | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0    | <i>tsoE</i>  | tRNA (adenosine(37)-N6)-threonylcarbamoyltransferase  |
| NW338_10425 | 77    | 47    | 84    | 287   | 0     | 11    | 142  | 412  | 0     | 0     | 25    | 29    | 26   | 10    | 0    | 0    | <i>ilvD</i>  | complex dimerization subunit type 1 TsaB              |
| NW338_10430 | 16    | 5     | 79    | 185   | 22    | 12    | 72   | 230  | 0     | 51    | 0     | 0     | 0    | 8     | 52   | 27   | <i>ilvB</i>  | tRNA (adenosine(37)-N6)-threonylcarbamoyltransferase  |
| NW338_10435 | 0     | 0     | 76    | 100   | 0     | 0     | 0    | 37   | 0     | 0     | 0     | 0     | 0    | 0     | 682  | 70   | .            | complex ATPase subunit type 1 TsaE                    |
| NW338_10440 | 0     | 0     | 19    | 173   | 0     | 0     | 161  | 171  | 0     | 0     | 0     | 0     | 0    | 27    | 0    | 0    | <i>ilvC</i>  | dihydroxy-acid dehydratase                            |
| NW338_10450 | 0     | 0     | 25    | 208   | 24    | 0     | 49   | 130  | 0     | 0     | 40    | 0     | 0    | 49    | 0    | 29   | <i>leuB</i>  | biosynthetic-type acetolactate synthase large subunit |
| NW338_10455 | 0     | 0     | 47    | 235   | 18    | 0     | 8    | 205  | 82    | 0     | 0     | 18    | 0    | 57    | 0    | 26   | <i>leuC</i>  | ACT domain-containing protein                         |
| NW338_10460 | 0     | 0     | 68    | 60    | 0     | 0     | 18   | 41   | 0     | 0     | 77    | 42    | 0    | 24    | 0    | 98   | <i>leuD</i>  | ketol-acid reductoisomerase                           |
| NW338_10465 | 0     | 0     | 0     | 55    | 0     | 0     | 60   | 114  | 0     | 0     | 33    | 38    | 0    | 11    | 0    | 24   | <i>ilvA</i>  | 3-isopropylmalate dehydrogenase                       |
| NW338_10495 | 0     | 70    | 0     | 133   | 480   | 114   | 200  | 62   | 0     | 0     | 0     | 111   | 78   | 30    | 0    | 0    | .            | 3-isopropylmalate dehydratase large subunit           |
| NW338_10500 | 35    | 59    | 35    | 73    | 127   | 88    | 297  | 210  | 49    | 0     | 19    | 0     | 23   | 0     | 110  | 108  | .            | 3-isopropylmalate dehydratase small subunit           |
| NW338_10505 | 362   | 533   | 264   | 371   | 1026  | 681   | 803  | 646  | 231   | 341   | 166   | 231   | 1002 | 496   | 797  | 587  | <i>sigB</i>  | threonine ammonia-lyase IlvA                          |
| NW338_10510 | 492   | 139   | 283   | 150   | 536   | 182   | 64   | 229  | 232   | 67    | 87    | 156   | 635  | 270   | 0    | 180  | <i>rsbW</i>  | SprT family protein                                   |
| NW338_10520 | 143   | 184   | 233   | 178   | 308   | 324   | 51   | 269  | 0     | 49    | 128   | 56    | 424  | 228   | 955  | 295  | .            | RNA-binding transcriptional accessory protein         |
| NW338_10525 | 749   | 26    | 284   | 379   | 889   | 541   | 1005 | 578  | 1444  | 1671  | 1575  | 1529  | 502  | 1722  | 1226 | 1198 | .            | RNA polymerase sigma factor SigB                      |
| NW338_10530 | 839   | 299   | 1791  | 600   | 292   | 716   | 915  | 669  | 0     | 289   | 504   | 1062  | 1300 | 0     | 0    | 654  | <i>mazE</i>  | anti-sigma B factor RsbW                              |
| NW338_10535 | 308   | 210   | 194   | 233   | 230   | 367   | 267  | 376  | 98    | 14    | 94    | 44    | 134  | 265   | 147  | 131  | <i>alr</i>   | PP2C family protein-serine/threonine phosphatase      |
| NW338_10540 | 199   | 44    | 0     | 0     | 700   | 108   | 168  | 170  | 0     | 0     | 116   | 0     | 0    | 0     | 0    | 152  | <i>acpS</i>  | type II toxin-antitoxin system PemK/MazF family toxin |
| NW338_10545 | 58    | 110   | 92    | 38    | 0     | 68    | 84   | 19   | 239   | 0     | 0     | 0     | 190  | 27    | 0    | 51   | .            | type II toxin-antitoxin system antitoxin MazE         |
| NW338_10550 | 0     | 10    | 72    | 73    | 80    | 62    | 26   | 69   | 0     | 89    | 26    | 32    | 52   | 117   | 58   | 43   | .            | alanine racemase                                      |
| NW338_10555 | 0     | 0     | 0     | 0     | 80    | 0     | 0    | 41   | 0     | 33    | 0     | 0     | 0    | 57    | 0    | 0    | .            | holo-ACP synthase                                     |
| NW338_10560 | 0     | 68    | 87    | 25    | 0     | 59    | 0    | 90   | 202   | 367   | 79    | 424   | 282  | 377   | 620  | 279  | .            | PH domain-containing protein                          |
| NW338_10565 | 43    | 20    | 83    | 105   | 62    | 83    | 47   | 71   | 82    | 48    | 159   | 303   | 78   | 170   | 136  | 205  | <i>kdpB</i>  | PH domain-containing protein                          |
| NW338_10570 | 111   | 78    | 97    | 72    | 103   | 27    | 6    | 29   | 140   | 180   | 292   | 329   | 287  | 565   | 0    | 333  | <i>kdpA</i>  | hypothetical protein                                  |
| NW338_10585 | 206   | 132   | 326   | 183   | 262   | 132   | 30   | 303  | 922   | 46    | 462   | 520   | 119  | 137   | 0    | 225  | .            | K(+)-transporting ATPase subunit C                    |
| NW338_10590 | 96    | 117   | 249   | 257   | 276   | 378   | 639  | 804  | 195   | 464   | 167   | 440   | 963  | 762   | 756  | 435  | .            | potassium-transporting ATPase subunit KdpB            |
| NW338_10595 | 158   | 122   | 181   | 180   | 574   | 449   | 255  | 517  | 45    | 48    | 112   | 114   | 182  | 166   | 0    | 202  | .            | potassium-transporting ATPase subunit KdpA            |
| NW338_10600 | 164   | 101   | 84    | 159   | 341   | 347   | 214  | 357  | 55    | 46    | 59    | 47    | 279  | 137   | 248  | 210  | .            | response regulator transcription factor               |
| NW338_10605 | 98    | 154   | 103   | 104   | 169   | 146   | 80   | 70   | 269   | 231   | 253   | 280   | 157  | 230   | 438  | 234  | .            | DEAD/DEAH box helicase                                |
| NW338_10615 | 136   | 0     | 0     | 55    | 0     | 29    | 0    | 56   | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0    | .            | UDP-N-acetylmuramyl-tripeptide--D-alanyl-D- alanine   |
| NW338_10620 | 0     | 0     | 88    | 39    | 0     | 90    | 0    | 148  | 200   | 0     | 0     | 0     | 0    | 0     | 0    | 0    | <i>csrR</i>  | ligase                                                |
| NW338_10625 | 31    | 43    | 76    | 56    | 67    | 94    | 35   | 103  | 75    | 33    | 28    | 66    | 56   | 35    | 0    | 63   | <i>cls</i>   | D-alanine--D-alanine ligase                           |
| NW338_10630 | 0     | 84    | 0     | 71    | 556   | 229   | 64   | 125  | 81    | 173   | 436   | 365   | 0    | 100   | 0    | 132  | .            | rod shape-determining protein RodA                    |
| NW338_10635 | 53    | 189   | 90    | 312   | 233   | 281   | 373  | 319  | 332   | 254   | 99    | 86    | 204  | 242   | 587  | 350  | <i>yidC</i>  | heavy-metal-associated domain-containing protein      |
| NW338_10640 | 0     | 0     | 30    | 0     | 39    | 0     | 16   | 31   | 0     | 0     | 0     | 0     | 73   | 1     |      |      |              |                                                       |

|             |      |      |      |      |      |      |      |      |       |       |      |      |      |      |      |      |             |                                                               |
|-------------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|-------------|---------------------------------------------------------------|
| NW338_10685 | 0    | 41   | 0    | 0    | 0    | 90   | 0    | 85   | 0     | 280   | 0    | 0    | 201  | 116  | 0    | 152  | .           | DUF1146 family protein                                        |
| NW338_10695 | 2871 | 2416 | 2009 | 1740 | 5167 | 4339 | 4309 | 2542 | 1573  | 1191  | 848  | 1464 | 4149 | 4717 | 3281 | 4380 | .           | FOF1 ATP synthase subunit epsilon                             |
| NW338_10700 | 3002 | 3174 | 2201 | 2616 | 2185 | 2376 | 2410 | 2061 | 555   | 604   | 273  | 350  | 1214 | 1413 | 1992 | 1732 | <i>atpD</i> | FOF1 ATP synthase subunit beta                                |
| NW338_10705 | 1023 | 1003 | 1062 | 722  | 1276 | 951  | 931  | 965  | 261   | 37    | 320  | 58   | 609  | 682  | 832  | 378  | <i>atpG</i> | ATP synthase F1 subunit gamma                                 |
| NW338_10710 | 2071 | 1476 | 1220 | 1459 | 1998 | 1795 | 2060 | 2200 | 342   | 157   | 532  | 298  | 1728 | 1255 | 1048 | 1116 | <i>atpA</i> | FOF1 ATP synthase subunit alpha                               |
| NW338_10715 | 464  | 731  | 355  | 581  | 989  | 826  | 331  | 362  | 112   | 92    | 199  | 254  | 792  | 171  | 484  | 226  | .           | FOF1 ATP synthase subunit delta                               |
| NW338_10720 | 810  | 1434 | 1234 | 1234 | 1994 | 1069 | 590  | 1175 | 116   | 442   | 206  | 540  | 497  | 734  | 1362 | 526  | .           | FOF1 ATP synthase subunit B                                   |
| NW338_10725 | 2573 | 1645 | 1555 | 2059 | 2785 | 3259 | 1745 | 2508 | 493   | 151   | 416  | 940  | 3144 | 865  | 4063 | 1093 | <i>atpE</i> | FOF1 ATP synthase subunit C                                   |
| NW338_10730 | 1894 | 1883 | 1063 | 1312 | 1661 | 1251 | 1442 | 1479 | 1126  | 537   | 1448 | 983  | 6648 | 5348 | 6213 | 3623 | <i>atpB</i> | FOF1 ATP synthase subunit A                                   |
| NW338_10740 | 872  | 821  | 627  | 575  | 485  | 583  | 578  | 501  | 265   | 100   | 132  | 229  | 1277 | 1202 | 549  | 1033 | <i>wecB</i> | UDP-N-acetylglucosamine 2-epimerase (non-hydrolyzing)         |
| NW338_10745 | 1096 | 1132 | 733  | 901  | 1006 | 824  | 1374 | 701  | 167   | 233   | 277  | 0    | 459  | 385  | 1112 | 428  | <i>upp</i>  | uracil phosphoribosyltransferase                              |
| NW338_10750 | 1387 | 1296 | 1105 | 1040 | 947  | 1269 | 893  | 1032 | 272   | 91    | 316  | 352  | 1061 | 943  | 1073 | 956  | .           | serine hydroxymethyltransferase                               |
| NW338_10755 | 1253 | 1628 | 1279 | 1574 | 1298 | 1139 | 452  | 1224 | 228   | 799   | 0    | 485  | 928  | 1811 | 2311 | 962  | .           | TIGR01440 family protein                                      |
| NW338_10760 | 0    | 0    | 0    | 0    | 0    | 63   | 0    | 0    | 0     | 0     | 0    | 134  | 264  | 32   | 0    | 0    | .           | low molecular weight protein arginine phosphatase             |
| NW338_10770 | 0    | 88   | 139  | 112  | 80   | 190  | 86   | 187  | 0     | 185   | 50   | 148  | 169  | 282  | 0    | 61   | <i>prmC</i> | peptide chain release factor M(5)-glutamine methyltransferase |
| NW338_10775 | 0    | 142  | 175  | 166  | 59   | 189  | 67   | 154  | 49    | 145   | 39   | 0    | 169  | 124  | 85   | 142  | <i>prfA</i> | peptide chain release factor 1                                |
| NW338_10780 | 47   | 43   | 163  | 74   | 42   | 201  | 103  | 292  | 289   | 53    | 0    | 290  | 323  | 176  | 0    | 257  | .           | thymidine kinase                                              |
| NW338_10785 | 1824 | 2533 | 2533 | 2493 | 1130 | 1463 | 2313 | 3263 | 2947  | 1751  | 2327 | 1184 | 2213 | 1137 | 1688 | 843  | .           | type B 50S ribosomal protein L31                              |
| NW338_10790 | 33   | 213  | 211  | 307  | 435  | 460  | 469  | 365  | 40    | 143   | 67   | 165  | 807  | 398  | 529  | 353  | <i>rho</i>  | transcription termination factor Rho                          |
| NW338_10795 | 513  | 564  | 519  | 663  | 553  | 383  | 505  | 547  | 480   | 676   | 225  | 366  | 611  | 785  | 694  | 580  | .           | aldehyde dehydrogenase family protein                         |
| NW338_10800 | 213  | 872  | 1631 | 1475 | 824  | 540  | 1946 | 2389 | 356   | 851   | 1353 | 1697 | 717  | 1211 | 1065 | 1628 | .           | helix-turn-helix transcriptional regulator                    |
| NW338_10805 | 217  | 136  | 211  | 238  | 267  | 372  | 504  | 354  | 131   | 332   | 119  | 40   | 345  | 233  | 207  | 247  | .           | UDP-N-acetylglucosamine 1-carboxyvinyltransferase             |
| NW338_10810 | 6223 | 5734 | 4012 | 3744 | 4792 | 4310 | 3257 | 3063 | 1060  | 1843  | 1638 | 1295 | 1529 | 1017 | 2459 | 1313 | .           | fructose-bisphosphate aldolase                                |
| NW338_10815 | 55   | 0    | 94   | 0    | 73   | 288  | 0    | 0    | 0     | 31    | 243  | 0    | 0    | 150  | 176  | 34   | .           | DUF2529 domain-containing protein                             |
| NW338_10820 | 175  | 117  | 53   | 221  | 194  | 114  | 336  | 218  | 135   | 315   | 157  | 78   | 198  | 316  | 327  | 261  | .           | CTP synthase                                                  |
| NW338_10825 | 479  | 175  | 503  | 219  | 326  | 249  | 175  | 152  | 0     | 60    | 0    | 95   | 499  | 148  | 319  | 414  | <i>rpoE</i> | DNA-directed RNA polymerase subunit delta                     |
| NW338_10830 | 33   | 66   | 34   | 22   | 0    | 110  | 12   | 14   | 61    | 37    | 0    | 0    | 83   | 32   | 0    | 35   | .           | GNAT family N-acetyltransferase                               |
| NW338_10835 | 35   | 135  | 274  | 78   | 31   | 136  | 13   | 48   | 0     | 174   | 238  | 0    | 358  | 115  | 211  | 54   | <i>coaW</i> | type II pantothenate kinase                                   |
| NW338_10840 | 69   | 42   | 29   | 210  | 137  | 76   | 325  | 365  | 168   | 221   | 125  | 159  | 767  | 473  | 0    | 306  | .           | DUF2750 domain-containing protein                             |
| NW338_10845 | 0    | 56   | 70   | 145  | 0    | 33   | 102  | 162  | 0     | 0     | 37   | 199  | 231  | 21   | 418  | 124  | .           | ATP-grasp domain-containing protein                           |
| NW338_10855 | 485  | 426  | 427  | 280  | 722  | 663  | 486  | 266  | 352   | 434   | 188  | 0    | 302  | 167  | 924  | 321  | .           | S-ribosylhomocysteine lyase                                   |
| NW338_10860 | 1093 | 726  | 544  | 356  | 924  | 558  | 666  | 571  | 1537  | 2425  | 1814 | 1174 | 1652 | 2176 | 2699 | 2642 | .           | hypothetical protein                                          |
| NW338_10865 | 1236 | 1339 | 629  | 899  | 583  | 687  | 589  | 848  | 439   | 332   | 559  | 245  | 888  | 1610 | 1069 | 1290 | .           | pyrimidine-nucleoside phosphorylase                           |
| NW338_10870 | 2816 | 1539 | 1568 | 1506 | 875  | 1578 | 561  | 911  | 445   | 657   | 485  | 483  | 1262 | 763  | 1312 | 1246 | <i>deoC</i> | deoxyribose-phosphate aldolase                                |
| NW338_10875 | 580  | 345  | 283  | 164  | 124  | 342  | 186  | 196  | 233   | 485   | 242  | 380  | 481  | 447  | 1965 | 1085 | <i>deoD</i> | purine-nucleoside phosphorylase                               |
| NW338_10880 | 1190 | 3726 | 2467 | 3342 | 2386 | 3395 | 4633 | 5871 | 0     | 36    | 819  | 951  | 2346 | 3226 | 980  | 2281 | .           | DNA starvation/stationary phase protection protein            |
| NW338_10885 | 0    | 131  | 236  | 223  | 60   | 0    | 196  | 51   | 0     | 197   | 101  | 0    | 0    | 0    | 0    | 74   | .           | thiol-disulfide oxidoreductase DCC family protein             |
| NW338_10890 | 34   | 123  | 66   | 162  | 325  | 252  | 119  | 110  | 0     | 36    | 30   | 18   | 26   | 117  | 193  | 81   | .           | EVE domain-containing protein                                 |
| NW338_10895 | 201  | 69   | 0    | 60   | 0    | 230  | 0    | 0    | 717   | 815   | 373  | 218  | 358  | 281  | 0    | 0    | .           | hypothetical protein                                          |
| NW338_10900 | 30   | 142  | 41   | 143  | 431  | 192  | 86   | 55   | 0     | 17    | 94   | 26   | 38   | 29   | 283  | 219  | .           | class I mannose-6-phosphate isomerase                         |
| NW338_10905 | 301  | 167  | 112  | 256  | 247  | 280  | 191  | 178  | 708   | 945   | 446  | 614  | 336  | 302  | 0    | 191  | .           | SDR family oxidoreductase                                     |
| NW338_10915 | 44   | 46   | 527  | 548  | 39   | 68   | 383  | 457  | 53    | 101   | 130  | 76   | 157  | 216  | 94   | 306  | <i>czrB</i> | CDF family zinc efflux transporter CzrB                       |
| NW338_10920 | 131  | 140  | 233  | 322  | 265  | 466  | 219  | 353  | 1574  | 2424  | 1745 | 1382 | 312  | 326  | 868  | 217  | .           | transcriptional regulator                                     |
| NW338_10940 | 262  | 82   | 98   | 220  | 45   | 61   | 206  | 132  | 141   | 114   | 123  | 181  | 96   | 48   | 0    | 95   | .           | Cof-type HAD-IIB family hydrolase                             |
| NW338_10945 | 55   | 0    | 104  | 42   | 0    | 26   | 79   | 169  | 0     | 0     | 0    | 0    | 0    | 0    | 0    | 45   | .           | ABC transporter ATP-binding protein                           |
| NW338_10950 | 1947 | 1731 | 1342 | 1126 | 737  | 836  | 1061 | 1059 | 477   | 986   | 1035 | 1005 | 390  | 361  | 246  | 459  | <i>glms</i> | glutamine--fructose-6-phosphate transaminase (isomerizing)    |
| NW338_10955 | 93   | 137  | 46   | 104  | 48   | 90   | 7    | 49   | 0     | 52    | 83   | 110  | 161  | 102  | 110  | 167  | .           | PTS mannitol transporter subunit IICB                         |
| NW338_10960 | 43   | 110  | 0    | 33   | 54   | 50   | 57   | 29   | 28    | 104   | 110  | 38   | 90   | 145  | 166  | 60   | .           | BglG family transcription antiterminator                      |
| NW338_10965 | 107  | 131  | 0    | 0    | 0    | 152  | 24   | 49   | 0     | 0     | 96   | 0    | 0    | 31   | 211  | 59   | .           | PTS sugar transporter subunit IIA                             |
| NW338_10970 | 68   | 17   | 58   | 27   | 45   | 11   | 54   | 18   | 47    | 82    | 76   | 0    | 0    | 12   | 0    | 71   | .           | mannitol-1-phosphate 5-dehydrogenase                          |
| NW338_10975 | 16   | 5    | 13   | 8    | 5    | 9    | 33   | 28   | 14    | 7     | 0    | 0    | 0    | 12   | 0    | 4    | <i>fntB</i> | LPXTG-anchored DUF1542 repeat protein FntB                    |
| NW338_10980 | 312  | 383  | 294  | 491  | 617  | 578  | 552  | 504  | 393   | 429   | 250  | 181  | 434  | 254  | 136  | 324  | <i>glmM</i> | phosphoglucosamine mutase                                     |
| NW338_10985 | 603  | 364  | 170  | 327  | 162  | 337  | 77   | 91   | 0     | 212   | 45   | 141  | 208  | 58   | 99   | 206  | .           | YbbR-like domain-containing protein                           |
| NW338_10990 | 141  | 244  | 229  | 74   | 256  | 140  | 180  | 86   | 0     | 132   | 52   | 62   | 146  | 295  | 209  | 22   | <i>cdaA</i> | diadenylate cyclase CdaA                                      |
| NW338_10995 | 173  | 133  | 207  | 102  | 139  | 199  | 100  | 105  | 886   | 570   | 566  | 736  | 486  | 544  | 393  | 780  | <i>rocF</i> | arginase                                                      |
| NW338_11000 | 124  | 251  | 496  | 433  | 463  | 462  | 640  | 788  | 323   | 168   | 520  | 674  | 681  | 776  | 1230 | 562  | .           | P-loop NTPase                                                 |
| NW338_11060 | 98   | 0    | 150  | 162  | 0    | 0    | 181  | 0    | 607   | 135   | 369  | 431  | 253  | 29   | 0    | 199  | <i>sepA</i> | multidrug efflux transporter SepA                             |
| NW338_11065 | 21   | 107  | 58   | 53   | 0    | 58   | 225  | 60   | 0     | 12    | 62   | 18   | 175  | 97   | 0    | 120  | <i>sdhM</i> | multidrug efflux MFS transporter SdhM                         |
| NW338_11070 | 298  | 498  | 171  | 251  | 295  | 238  | 110  | 107  | 163   | 156   | 129  | 0    | 1209 | 706  | 654  | 463  | .           | hemolysin III family protein                                  |
| NW338_11075 | 329  | 412  | 259  | 336  | 384  | 398  | 243  | 214  | 293   | 318   | 341  | 262  | 313  | 307  | 427  | 332  | .           | UDPGP type 1 family protein                                   |
| NW338_11080 | 251  | 284  | 88   | 357  | 179  | 405  | 40   | 160  | 330   | 62    | 86   | 47   | 674  | 312  | 356  | 143  | .           | metal-dependent hydrolase                                     |
| NW338_11085 | 464  | 501  | 474  | 0    | 242  | 331  | 639  | 154  | 7640  | 6277  | 4988 | 4205 | 2523 | 2539 | 1001 | 2909 | .           | hypothetical protein                                          |
| NW338_11090 | 0    | 84   | 87   | 51   | 227  | 226  | 421  | 215  | 124   | 12    | 109  | 115  | 95   | 20   | 123  | 129  | .           | YjiH family protein                                           |
| NW338_11095 | 0    | 0    | 0    | 53   | 39   | 62   | 89   | 34   | 0     | 0     | 0    | 25   | 0    | 42   | 0    | 13   | .           | iron chelate uptake ABC transporter family permease subunit   |
| NW338_11100 | 28   | 40   | 47   | 43   | 0    | 38   | 10   | 9    | 110   | 0     | 0    | 0    | 0    | 0    | 0    | 0    | .           | iron ABC transporter permease                                 |
| NW338_11105 | 0    | 249  | 187  | 163  | 154  | 220  | 252  | 180  | 0     | 16    | 0    | 0    | 161  | 14   | 0    | 0    | .           | Fe(3+) dicitrate ABC transporter substrate-binding protein    |
| NW338_11115 | 27   | 65   | 60   | 0    | 47   | 46   | 10   | 9    | 57    | 100   | 39   | 0    | 0    | 19   | 0    | 25   | <i>sfaC</i> | staphyloferrin A biosynthesis protein SfaC                    |
| NW338_11120 | 43   | 60   | 28   | 30   | 36   | 58   | 92   | 23   | 0     | 70    | 0    | 32   | 0    | 15   | 0    | 29   | <i>sfaB</i> | staphyloferrin A synthetase SfaB                              |
| NW338_11125 | 24   | 0    | 0    | 37   | 32   | 27   | 63   | 0    | 0     | 0     | 35   | 0    | 0    | 0    | 77   | 11   | <i>sfaA</i> | staphyloferrin A export MFS transporter                       |
| NW338_11130 | 98   | 32   | 44   | 14   | 91   | 53   | 90   | 104  | 91    | 128   | 109  | 124  | 0    | 14   | 0    | 108  | <i>sfaD</i> | D-ornithine--citrate ligase SfaD                              |
| NW338_11135 | 2880 | 2261 | 1180 | 1064 | 1388 | 682  | 773  | 412  | 10608 | 14017 | 7548 | 5838 | 1799 | 3202 | 1374 | 2344 | .           | Asp23/Gls24 family envelope stress response protein           |
| NW338_11140 | 971  | 1671 | 662  | 690  | 159  | 213  | 43   | 211  | 2150  | 2088  | 1905 | 1640 | 689  | 1110 | 766  | 1881 | .           | DUF2273 domain-containing protein                             |
| NW338_11145 | 1890 | 961  | 435  | 645  | 1556 | 846  | 256  | 496  | 2404  | 1600  | 1676 | 1876 | 1319 | 1235 | 1000 | 1817 | <i>amaP</i> | alkaline shock response membrane anchor protein AmaP          |
| NW338_11150 | 30   | 0    | 0    | 43   | 191  | 39   | 61   | 57   | 0     | 20    | 0    | 0    | 177  | 85   | 0    | 268  | .           | BCCT family transporter                                       |
| NW338_11155 | 128  | 66   | 314  | 110  | 105  | 39   | 142  | 163  | 117   | 49    | 85   | 97   | 93   | 13   | 0    | 115  | .           | zinc-binding alcohol dehydrogenase family protein             |
| NW338_11160 | 709  | 722  | 893  | 933  | 508  | 394  | 42   |      |       |       |      |      |      |      |      |      |             |                                                               |

|             |      |      |       |      |      |      |       |      |      |       |      |      |      |      |      |             |                            |                                                         |                                                          |
|-------------|------|------|-------|------|------|------|-------|------|------|-------|------|------|------|------|------|-------------|----------------------------|---------------------------------------------------------|----------------------------------------------------------|
| NW338_11265 | 0    | 50   | 186   | 85   | 53   | 146  | 256   | 130  | 0    | 0     | 0    | 0    | 0    | 0    | 11   | <i>alsS</i> | acetolactate synthase AlsS |                                                         |                                                          |
| NW338_11280 | 418  | 1093 | 1638  | 1246 | 2240 | 1610 | 2989  | 2994 | 4689 | 12665 | 3934 | 7054 | 3234 | 2739 | 1809 | 2386        | <i>rpsI</i>                | 30S ribosomal protein S9                                |                                                          |
| NW338_11285 | 611  | 305  | 1085  | 457  | 490  | 702  | 1677  | 537  | 397  | 369   | 246  | 668  | 995  | 879  | 1027 | 677         | <i>rplM</i>                | 50S ribosomal protein L13                               |                                                          |
| NW338_11290 | 165  | 12   | 97    | 49   | 162  | 141  | 113   | 132  | 0    | 20    | 0    | 127  | 44   | 98   | 0    | 98          | <i>truA</i>                | tRNA pseudouridine(38-40) synthase TruA                 |                                                          |
| NW338_11295 | 128  | 95   | 32    | 31   | 273  | 48   | 139   | 109  | 0    | 60    | 130  | 30   | 0    | 70   | 232  | 216         | .                          | EcT                                                     | energy-coupling factor transporter transmembrane protein |
| NW338_11305 | 57   | 12   | 36    | 112  | 31   | 61   | 174   | 103  | 137  | 0     | 55   | 70   | 0    | 15   | 100  | 14          | .                          |                                                         | energy-coupling factor transporter ATPase                |
| NW338_11310 | 940  | 1054 | 1490  | 864  | 582  | 1064 | 1393  | 1373 | 471  | 289   | 353  | 590  | 942  | 861  | 720  | 655         | <i>rplQ</i>                | 50S ribosomal protein L17                               |                                                          |
| NW338_11315 | 1221 | 1590 | 1090  | 1021 | 1947 | 2204 | 2081  | 1883 | 248  | 259   | 455  | 767  | 1704 | 995  | 921  | 466         | .                          |                                                         | DNA-directed RNA polymerase subunit alpha                |
| NW338_11320 | 2011 | 1928 | 1573  | 1799 | 3017 | 5897 | 3839  | 4666 | 710  | 1387  | 832  | 1458 | 3577 | 3193 | 3495 | 1635        | <i>rpsK</i>                | 30S ribosomal protein S11                               |                                                          |
| NW338_11325 | 1507 | 2613 | 1507  | 2451 | 1257 | 2601 | 3537  | 2267 | 161  | 223   | 350  | 595  | 899  | 392  | 965  | 932         | <i>rpsM</i>                | 30S ribosomal protein S13                               |                                                          |
| NW338_11330 | 1036 | 1315 | 656   | 1615 | 336  | 704  | 844   | 714  | 0    | 574   | 0    | 0    | 725  | 239  | 0    | 1117        | <i>rpmJ</i>                | 50S ribosomal protein L36                               |                                                          |
| NW338_11335 | 1715 | 3330 | 1895  | 1572 | 2876 | 2589 | 2169  | 3209 | 277  | 73    | 672  | 111  | 937  | 62   | 2406 | 471         | <i>infA</i>                | translation initiation factor IF-1                      |                                                          |
| NW338_11340 | 1933 | 3204 | 2512  | 2827 | 2997 | 2821 | 4387  | 3566 | 939  | 315   | 489  | 872  | 1493 | 1462 | 3746 | 1088        | .                          |                                                         | adenylate kinase                                         |
| NW338_11345 | 1746 | 3664 | 2306  | 2821 | 1882 | 3093 | 2346  | 2532 | 1282 | 1046  | 1303 | 924  | 2723 | 2415 | 2087 | 2349        | <i>secY</i>                | preprotein translocase subunit SecY                     |                                                          |
| NW338_11350 | 3111 | 5372 | 13217 | 6588 | 5902 | 7419 | 12832 | 8067 | 1188 | 1881  | 1061 | 1606 | 5437 | 5986 | 2720 | 4002        | <i>rplO</i>                | 50S ribosomal protein L15                               |                                                          |
| NW338_11355 | 1136 | 2670 | 1793  | 3020 | 3032 | 2824 | 3394  | 1952 | 292  | 0     | 246  | 0    | 198  | 1752 | 511  | 573         | <i>rpmD</i>                | 50S ribosomal protein L30                               |                                                          |
| NW338_11360 | 1749 | 3993 | 2777  | 4072 | 2877 | 3583 | 3832  | 4270 | 226  | 1184  | 647  | 722  | 1049 | 1077 | 367  | 1773        | <i>rpsE</i>                | 30S ribosomal protein S5                                |                                                          |
| NW338_11365 | 2047 | 3832 | 3761  | 3276 | 1364 | 2753 | 3131  | 2266 | 473  | 89    | 775  | 925  | 439  | 1207 | 0    | 1029        | <i>rplR</i>                | 50S ribosomal protein L18                               |                                                          |
| NW338_11370 | 1068 | 1614 | 1249  | 1136 | 1090 | 1927 | 1698  | 2273 | 662  | 721   | 356  | 1048 | 804  | 546  | 1152 | 1554        | <i>rplF</i>                | 50S ribosomal protein L6                                |                                                          |
| NW338_11375 | 1835 | 1757 | 1496  | 2385 | 1977 | 2388 | 1402  | 2573 | 0    | 121   | 270  | 325  | 1993 | 1534 | 1770 | 1335        | <i>rpsH</i>                | 30S ribosomal protein S8                                |                                                          |
| NW338_11385 | 1371 | 2300 | 1970  | 2089 | 1137 | 1795 | 2110  | 2205 | 737  | 453   | 1177 | 1495 | 2736 | 1317 | 2552 | 1983        | <i>rplE</i>                | 50S ribosomal protein L5                                |                                                          |
| NW338_11390 | 1688 | 3524 | 2905  | 3322 | 1347 | 1651 | 2412  | 1931 | 922  | 664   | 1088 | 1195 | 959  | 871  | 1414 | 540         | <i>rplX</i>                | 50S ribosomal protein L24                               |                                                          |
| NW338_11395 | 2103 | 3376 | 2908  | 3063 | 3080 | 3274 | 3525  | 4410 | 959  | 865   | 1275 | 1055 | 1402 | 4125 | 3759 | 2169        | <i>rplN</i>                | 50S ribosomal protein L14                               |                                                          |
| NW338_11400 | 1246 | 2085 | 1436  | 2042 | 829  | 1864 | 2254  | 2774 | 229  | 370   | 168  | 427  | 135  | 895  | 1007 | 983         | <i>rpsQ</i>                | 30S ribosomal protein S17                               |                                                          |
| NW338_11405 | 1532 | 2807 | 988   | 2505 | 4307 | 3307 | 5352  | 5678 | 289  | 0     | 912  | 384  | 2809 | 2573 | 0    | 1805        | <i>rpmC</i>                | 50S ribosomal protein L29                               |                                                          |
| NW338_11410 | 2177 | 4219 | 1830  | 3508 | 3715 | 4144 | 4903  | 5053 | 1786 | 335   | 641  | 775  | 1894 | 1403 | 1822 | 1971        | <i>rplP</i>                | 50S ribosomal protein L16                               |                                                          |
| NW338_11415 | 989  | 1699 | 1624  | 1770 | 1482 | 1386 | 1974  | 3120 | 173  | 263   | 229  | 315  | 469  | 585  | 1308 | 734         | <i>rpsC</i>                | 30S ribosomal protein S3                                |                                                          |
| NW338_11420 | 1599 | 2450 | 2612  | 3371 | 2559 | 3244 | 4193  | 4868 | 297  | 45    | 428  | 2093 | 1769 | 2281 | 978  | 978         | <i>rplV</i>                | 50S ribosomal protein L22                               |                                                          |
| NW338_11425 | 1372 | 1964 | 2685  | 1529 | 1026 | 858  | 1689  | 1276 | 217  | 292   | 309  | 181  | 128  | 858  | 936  | 173         | <i>rpsS</i>                | 30S ribosomal protein S19                               |                                                          |
| NW338_11430 | 2100 | 2875 | 2525  | 2913 | 2060 | 2844 | 2616  | 4072 | 479  | 833   | 891  | 798  | 1909 | 1420 | 1049 | 1514        | <i>rplB</i>                | 50S ribosomal protein L2                                |                                                          |
| NW338_11435 | 428  | 1202 | 505   | 1425 | 639  | 1260 | 1266  | 1297 | 220  | 687   | 0    | 0    | 558  | 668  | 0    | 618         | <i>rplW</i>                | 50S ribosomal protein L23                               |                                                          |
| NW338_11440 | 676  | 1077 | 949   | 1325 | 551  | 851  | 2557  | 1767 | 470  | 276   | 236  | 540  | 1324 | 1405 | 271  | 885         | <i>rplD</i>                | 50S ribosomal protein L4                                |                                                          |
| NW338_11445 | 978  | 1206 | 1126  | 1078 | 1760 | 1557 | 1739  | 2741 | 418  | 433   | 847  | 566  | 2031 | 1180 | 1581 | 1104        | <i>rplC</i>                | 50S ribosomal protein L3                                |                                                          |
| NW338_11450 | 1696 | 1186 | 1624  | 2367 | 3596 | 3373 | 4685  | 4174 | 1871 | 1639  | 1367 | 2207 | 4588 | 5435 | 8777 | 5379        | <i>rpsJ</i>                | 30S ribosomal protein S10                               |                                                          |
| NW338_11455 | 295  | 375  | 125   | 627  | 64   | 0    | 26    | 0    | 617  | 740   | 540  | 837  | 0    | 431  | 1538 | 353         | .                          |                                                         | hypothetical protein                                     |
| NW338_11460 | 259  | 200  | 78    | 214  | 262  | 232  | 235   | 140  | 403  | 408   | 478  | 490  | 991  | 996  | 924  | 675         | .                          |                                                         | NCS2 family permease                                     |
| NW338_11465 | 127  | 125  | 32    | 101  | 148  | 92   | 19    | 47   | 28   | 77    | 81   | 23   | 0    | 74   | 124  | 89          | .                          |                                                         | DNA topoisomerase III                                    |
| NW338_11475 | 49   | 61   | 100   | 39   | 0    | 98   | 153   | 13   | 319  | 202   | 313  | 154  | 53   | 181  | 0    | 266         | .                          |                                                         | GNAT family N-acetyltransferase                          |
| NW338_11480 | 33   | 132  | 169   | 96   | 160  | 305  | 84    | 130  | 0    | 76    | 0    | 28   | 150  | 0    | 0    | 62          | .                          |                                                         | GRP family sugar transporter                             |
| NW338_11490 | 31   | 18   | 65    | 28   | 42   | 0    | 11    | 13   | 0    | 0     | 0    | 0    | 0    | 45   | 0    | 73          | .                          |                                                         | AEC family transporter                                   |
| NW338_11495 | 0    | 0    | 0     | 114  | 383  | 475  | 520   | 401  | 0    | 292   | 0    | 148  | 216  | 247  | 0    | 0           | .                          |                                                         | SE1832 family protein                                    |
| NW338_11500 | 136  | 120  | 154   | 0    | 0    | 78   | 65    | 137  | 165  | 50    | 0    | 0    | 609  | 257  | 0    | 408         | <i>mspA</i>                | membrane stabilizing protein MspA                       |                                                          |
| NW338_11510 | 131  | 137  | 107   | 113  | 191  | 173  | 199   | 248  | 36   | 41    | 69   | 8    | 98   | 193  | 163  | 97          | .                          |                                                         | efflux RND transporter permease subunit                  |
| NW338_11515 | 356  | 231  | 283   | 358  | 552  | 485  | 501   | 405  | 83   | 110   | 118  | 225  | 544  | 240  | 416  | 222         | <i>femX</i>                | lipid II:glycine glycyItransferase                      |                                                          |
| NW338_11520 | 0    | 0    | 0     | 0    | 0    | 24   | 0     | 0    | 0    | 127   | 166  | 0    | 187  | 0    | 0    | 0           | .                          |                                                         | hypothetical protein                                     |
| NW338_11525 | 0    | 0    | 0     | 30   | 0    | 8    | 126   | 15   | 156  | 86    | 113  | 317  | 0    | 134  | 0    | 88          | .                          |                                                         | VOC family protein                                       |
| NW338_11530 | 0    | 0    | 0     | 0    | 0    | 48   | 0     | 0    | 0    | 0     | 0    | 114  | 0    | 116  | 0    | 29          | .                          |                                                         | winged helix DNA-binding protein                         |
| NW338_11535 | 36   | 13   | 0     | 10   | 21   | 34   | 0     | 10   | 43   | 0     | 0    | 0    | 0    | 0    | 215  | 0           | .                          |                                                         | MFS transporter                                          |
| NW338_11540 | 213  | 299  | 158   | 204  | 109  | 238  | 59    | 117  | 345  | 0     | 181  | 160  | 101  | 146  | 0    | 174         | <i>sarV</i>                | HTH-type transcriptional regulator SarV                 |                                                          |
| NW338_11550 | 318  | 146  | 142   | 367  | 218  | 143  | 224   | 359  | 51   | 47    | 84   | 183  | 402  | 207  | 0    | 450         | <i>moaA</i>                | GTP 3';8-cyclase MoaA                                   |                                                          |
| NW338_11555 | 292  | 186  | 183   | 239  | 64   | 142  | 86    | 177  | 0    | 109   | 70   | 41   | 185  | 68   | 0    | 225         | <i>moaB</i>                | molybdenum cofactor guanylyltransferase MoaB            |                                                          |
| NW338_11560 | 0    | 312  | 83    | 217  | 107  | 140  | 44    | 617  | 259  | 0     | 0    | 0    | 201  | 58   | 0    | 0           | <i>moaD</i>                | molybdopterin converting factor subunit 1               |                                                          |
| NW338_11565 | 104  | 278  | 357   | 483  | 348  | 294  | 343   | 316  | 117  | 146   | 142  | 583  | 290  | 260  | 206  | 97          | .                          |                                                         | molybdenum cofactor biosynthesis protein MoaE            |
| NW338_11570 | 147  | 39   | 154   | 96   | 347  | 67   | 42    | 78   | 0    | 0     | 86   | 50   | 97   | 56   | 348  | 79          | <i>mobB</i>                | molybdopterin-guanine dinucleotide biosynthesis protein |                                                          |
| NW338_11575 | 217  | 126  | 54    | 279  | 133  | 186  | 291   | 198  | 48   | 38    | 70   | 58   | 113  | 133  | 0    | 209         | .                          | B                                                       | molybdopterin molybdotransferase MoeA                    |
| NW338_11580 | 58   | 391  | 231   | 121  | 205  | 216  | 125   | 324  | 704  | 742   | 343  | 364  | 383  | 378  | 342  | 272         | <i>moaC</i>                | cyclic pyranopterin monophosphate synthase MoaC         |                                                          |
| NW338_11585 | 324  | 163  | 191   | 299  | 200  | 219  | 224   | 397  | 0    | 0     | 420  | 259  | 303  | 458  | 363  | 715         | .                          |                                                         | molybdenum cofactor biosynthesis protein MoaB            |
| NW338_11590 | 28   | 76   | 49    | 113  | 117  | 125  | 101   | 89   | 121  | 16    | 125  | 125  | 71   | 27   | 0    | 54          | .                          |                                                         | Thif family adenyllyltransferase                         |
| NW338_11595 | 289  | 205  | 219   | 196  | 346  | 31   | 283   | 163  | 100  | 26    | 0    | 0    | 0    | 22   | 0    | 122         | .                          |                                                         | ATP-binding cassette domain-containing protein           |
| NW338_11600 | 256  | 317  | 236   | 489  | 326  | 178  | 143   | 67   | 431  | 354   | 194  | 402  | 193  | 101  | 1014 | 292         | <i>modB</i>                | molybdate ABC transporter permease subunit              |                                                          |
| NW338_11605 | 147  | 337  | 258   | 262  | 113  | 61   | 193   | 75   | 0    | 41    | 81   | 62   | 189  | 17   | 0    | 246         | <i>modA</i>                | molybdate ABC transporter substrate-binding protein     |                                                          |
| NW338_11610 | 36   | 92   | 162   | 282  | 127  | 165  | 142   | 137  | 0    | 82    | 55   | 185  | 341  | 239  | 443  | 530         | <i>fdhD</i>                | formate dehydrogenase accessory sulfurtransferase FdhD  |                                                          |
| NW338_11615 | 0    | 12   | 77    | 30   | 0    | 35   | 13    | 46   | 0    | 0     | 54   | 0    | 0    | 18   | 0    | 71          | .                          |                                                         | GNAT family N-acetyltransferase                          |
| NW338_11620 | 0    | 0    | 53    | 67   | 121  | 11   | 0     | 34   | 106  | 0     | 75   | 0    | 0    | 0    | 0    | 0           | .                          |                                                         | biotin transporter BioY                                  |
| NW338_11625 | 0    | 17   | 52    | 29   | 0    | 50   | 124   | 0    | 0    | 0     | 0    | 0    | 0    | 14   | 0    | 0           | .                          |                                                         | nucleoside hydrolase                                     |
| NW338_11630 | 47   | 53   | 146   | 157  | 110  | 220  | 291   | 440  | 194  | 342   | 286  | 134  | 0    | 30   | 0    | 0           | .                          |                                                         | ABC transporter substrate-binding protein                |
| NW338_11635 | 78   | 121  | 325   | 223  | 0    | 34   | 115   | 212  | 0    | 28    | 111  | 152  | 225  | 56   | 297  | 221         | .                          |                                                         | acyl-CoA/acyl-ACP dehydrogenase                          |
| NW338_11640 | 0    | 0    | 0     | 0    | 0    | 20   | 95    | 13   | 0    | 0     | 0    | 27   | 0    | 0    | 0    | 0           | <i>yut</i>                 | urea transporter                                        |                                                          |
| NW338_11645 | 0    | 84   | 149   | 0    | 0    | 226  | 0     | 31   | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 59          | .                          |                                                         | urease subunit gamma                                     |
| NW338_11650 | 0    | 62   | 0     | 147  | 0    | 15   | 0     | 80   | 0    | 39    | 0    | 0    | 0    | 0    | 0    | 0           | .                          |                                                         | urease subunit beta                                      |
| NW338_11655 | 25   | 43   | 167   | 82   | 115  | 22   | 97    | 29   | 0    | 0     | 0    | 33   | 0    | 76   | 0    | 7           | <i>ureC</i>                | urease subunit alpha                                    |                                                          |
| NW338_11660 | 0    | 21   | 0     | 25   | 0    | 0    | 156   | 91   | 0    | 0     | 0    | 0    | 0    | 0    | 0    | 0           | <i>ureE</i>                | urease accessory protein UreE                           |                                                          |
| NW338_11665 | 0    | 46   | 28    | 27   | 36   | 0    | 0     | 14   | 0    | 0     | 0    | 35   | 52   | 0    | 0    | 0           | .                          |                                                         | urease accessory protein UreF                            |
| NW338_11670 | 46   | 57   | 63    | 53   | 41   | 40   | 115   | 54   | 0    | 174   | 0    | 40   | 0    | 83   | 0    | 0           | <i>ureG</i>                | urease accessory protein UreG                           |                                                          |
| NW338_11675 | 55   |      |       |      |      |      |       |      |      |       |      |      |      |      |      |             |                            |                                                         |                                                          |

|             |      |      |      |      |      |      |     |     |      |      |      |      |      |      |      |      |                            |                                                              |
|-------------|------|------|------|------|------|------|-----|-----|------|------|------|------|------|------|------|------|----------------------------|--------------------------------------------------------------|
| NW338_11790 | 192  | 200  | 413  | 369  | 193  | 195  | 516 | 224 | 130  | 356  | 900  | 535  | 530  | 497  | 299  | 398  | .                          | MurR/RpiR family transcriptional regulator                   |
| NW338_11795 | 256  | 210  | 459  | 287  | 320  | 382  | 350 | 367 | 81   | 207  | 168  | 149  | 641  | 376  | 256  | 408  | .                          | amino acid permease                                          |
| NW338_11800 | 372  | 80   | 0    | 39   | 0    | 111  | 169 | 0   | 165  | 45   | 483  | 351  | 232  | 38   | 474  | 253  | .                          | hypothetical protein                                         |
| NW338_11805 | 0    | 256  | 159  | 211  | 0    | 0    | 0   | 170 | 316  | 747  | 1145 | 827  | 506  | 568  | 935  | 232  | .                          | hypothetical protein                                         |
| NW338_11810 | 0    | 50   | 101  | 0    | 351  | 0    | 0   | 0   | 1202 | 341  | 548  | 517  | 185  | 409  | 479  | 595  | .                          | hypothetical protein                                         |
| NW338_11815 | 113  | 40   | 77   | 30   | 39   | 84   | 271 | 65  | 0    | 0    | 201  | 38   | 130  | 0    | 0    | 142  | .                          | HAD family hydrolase                                         |
| NW338_11820 | 0    | 10   | 0    | 36   | 0    | 36   | 67  | 0   | 0    | 0    | 0    | 0    | 121  | 30   | 189  | 39   | .                          | bile acid:sodium symporter family protein                    |
| NW338_11825 | 0    | 0    | 73   | 26   | 0    | 0    | 0   | 37  | 774  | 737  | 1041 | 640  | 0    | 148  | 838  | 240  | .                          | hypothetical protein                                         |
| NW338_11830 | 53   | 40   | 53   | 62   | 0    | 38   | 13  | 44  | 70   | 41   | 106  | 77   | 104  | 186  | 159  | 53   | .                          | alpha-glucoside-specific PTS transporter subunit IIBC        |
| NW338_11835 | 0    | 0    | 0    | 0    | 100  | 16   | 27  | 0   | 79   | 0    | 58   | 74   | 0    | 0    | 0    | 0    | .                          | MurR/RpiR family transcriptional regulator                   |
| NW338_11840 | 689  | 522  | 288  | 313  | 258  | 208  | 302 | 200 | 1011 | 997  | 1147 | 569  | 512  | 1743 | 524  | 1049 | .                          | SRPBCC domain-containing protein                             |
| NW338_11845 | 254  | 22   | 96   | 21   | 155  | 136  | 149 | 105 | 40   | 0    | 68   | 93   | 340  | 240  | 129  | 168  | .                          | Na+/H+ antiporter NhaC family protein                        |
| NW338_11850 | 50   | 0    | 0    | 69   | 0    | 11   | 18  | 17  | 92   | 187  | 0    | 128  | 0    | 0    | 0    | 53   | .                          | hypothetical protein                                         |
| NW338_11855 | 146  | 119  | 158  | 161  | 200  | 35   | 47  | 132 | 60   | 0    | 47   | 242  | 585  | 228  | 0    | 255  | .                          | SDR family oxidoreductase                                    |
| NW338_11860 | 0    | 59   | 26   | 39   | 34   | 11   | 28  | 55  | 0    | 0    | 0    | 0    | 141  | 36   | 0    | 11   | .                          | M20 peptidase aminoacylase family protein                    |
| NW338_11865 | 156  | 229  | 92   | 210  | 20   | 104  | 167 | 47  | 181  | 116  | 311  | 86   | 114  | 420  | 74   | 73   | hutI                       | imidazolonepropionase                                        |
| NW338_11870 | 381  | 379  | 183  | 144  | 96   | 39   | 97  | 50  | 67   | 227  | 76   | 94   | 209  | 406  | 157  | 235  | hutU                       | urocanate hydratase                                          |
| NW338_11880 | 157  | 225  | 87   | 245  | 347  | 117  | 22  | 78  | 337  | 123  | 230  | 306  | 277  | 650  | 98   | 270  | hutG                       | formimidoylglutamase                                         |
| NW338_11885 | 116  | 35   | 93   | 77   | 0    | 85   | 117 | 94  | 458  | 251  | 0    | 64   | 728  | 195  | 393  | 211  | sdpC                       | CPBP family intramembrane metalloprotease SdpC               |
| NW338_11890 | 83   | 121  | 56   | 165  | 128  | 220  | 15  | 197 | 665  | 508  | 808  | 816  | 402  | 193  | 0    | 126  | .                          | ribose 5-phosphate isomerase A                               |
| NW338_11895 | 0    | 15   | 0    | 93   | 0    | 73   | 124 | 59  | 0    | 24   | 68   | 37   | 54   | 204  | 266  | 179  | .                          | MOSC domain-containing protein                               |
| NW338_11900 | 0    | 0    | 38   | 50   | 170  | 85   | 128 | 77  | 51   | 0    | 0    | 24   | 70   | 40   | 0    | 162  | .                          | galactose mutarotase                                         |
| NW338_11905 | 0    | 49   | 0    | 113  | 76   | 94   | 63  | 101 | 0    | 49   | 0    | 0    | 0    | 367  | 0    | 109  | .                          | YnfA family protein                                          |
| NW338_11915 | 98   | 57   | 164  | 25   | 106  | 26   | 66  | 49  | 49   | 0    | 0    | 0    | 67   | 0    | 0    | 69   | .                          | ABC transporter permease                                     |
| NW338_11920 | 32   | 53   | 21   | 93   | 117  | 80   | 34  | 0   | 0    | 0    | 0    | 83   | 0    | 30   | 0    | 20   | .                          | ABC transporter ATP-binding protein                          |
| NW338_11925 | 155  | 54   | 46   | 0    | 699  | 404  | 66  | 273 | 550  | 860  | 397  | 298  | 0    | 259  | 0    | 104  | .                          | DUF805 domain-containing protein                             |
| NW338_11930 | 0    | 26   | 32   | 46   | 0    | 35   | 99  | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 63   | .                          | DNA-3-methyladenine glycosylase                              |
| NW338_11935 | 0    | 55   | 37   | 41   | 32   | 17   | 24  | 135 | 202  | 193  | 82   | 146  | 22   | 76   | 111  | gltS | sodium/glutamate symporter |                                                              |
| NW338_11940 | 109  | 182  | 280  | 266  | 261  | 271  | 169 | 201 | 415  | 514  | 245  | 296  | 364  | 531  | 414  | 337  | fni                        | type 2 isopentenyl-diphosphate Delta-isomerase               |
| NW338_11945 | 49   | 27   | 0    | 54   | 0    | 89   | 22  | 40  | 64   | 17   | 0    | 0    | 50   | 29   | 97   | 19   | corA                       | magnesium/cobalt transporter CorA                            |
| NW338_11950 | 88   | 32   | 0    | 66   | 0    | 0    | 21  | 0   | 243  | 231  | 435  | 202  | 0    | 28   | 0    | 98   | .                          | thioesterase family protein                                  |
| NW338_11955 | 136  | 311  | 211  | 94   | 59   | 73   | 25  | 51  | 0    | 0    | 516  | 236  | 112  | 97   | 219  | 73   | .                          | hypothetical protein                                         |
| NW338_11960 | 0    | 80   | 81   | 91   | 164  | 230  | 142 | 225 | 178  | 274  | 94   | 358  | 435  | 416  | 0    | 213  | .                          | alpha/beta hydrolase                                         |
| NW338_11965 | 45   | 0    | 91   | 87   | 204  | 10   | 48  | 164 | 82   | 102  | 165  | 270  | 0    | 149  | 0    | 283  | .                          | hypothetical protein                                         |
| NW338_11975 | 44   | 25   | 0    | 36   | 370  | 355  | 298 | 364 | 81   | 0    | 0    | 0    | 55   | 237  | 0    | 0    | .                          | HlyD family efflux transporter periplasmic adaptor subunit   |
| NW338_11980 | 0    | 17   | 0    | 34   | 0    | 38   | 37  | 64  | 95   | 0    | 0    | 0    | 0    | 25   | 166  | 46   | .                          | TetR/AcrR family transcriptional regulator                   |
| NW338_11985 | 36   | 8    | 46   | 38   | 87   | 20   | 26  | 52  | 49   | 0    | 0    | 47   | 0    | 42   | 0    | 40   | .                          | multidrug efflux MFS transporter                             |
| NW338_11995 | 52   | 0    | 0    | 18   | 36   | 24   | 30  | 66  | 0    | 12   | 91   | 0    | 85   | 20   | 0    | 44   | .                          | zinc ribbon domain-containing protein                        |
| NW338_12000 | 0    | 62   | 192  | 81   | 84   | 73   | 68  | 104 | 0    | 106  | 291  | 107  | 1222 | 89   | 371  | 178  | .                          | MarR family transcriptional regulator                        |
| NW338_12005 | 0    | 16   | 20   | 19   | 105  | 34   | 21  | 63  | 54   | 16   | 131  | 153  | 200  | 28   | 179  | 218  | .                          | YdcF family protein                                          |
| NW338_12015 | 0    | 249  | 0    | 0    | 0    | 0    | 0   | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .                          | ABC transporter ATP-binding protein                          |
| NW338_12020 | 0    | 33   | 0    | 0    | 0    | 0    | 67  | 0   | 0    | 0    | 0    | 23   | 0    | 0    | 0    | 52   | .                          | ABC transporter permease                                     |
| NW338_12025 | 0    | 0    | 0    | 0    | 37   | 9    | 15  | 0   | 90   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | hssR                       | DNA-binding heme response regulator HssR                     |
| NW338_12030 | 65   | 35   | 14   | 66   | 0    | 35   | 51  | 14  | 44   | 59   | 159  | 0    | 68   | 0    | 67   | 44   | hssS                       | heme sensor histidine kinase HssS                            |
| NW338_12035 | 0    | 65   | 44   | 0    | 0    | 0    | 0   | 0   | 0    | 0    | 143  | 0    | 0    | 292  | 773  | 267  | .                          | LytTR family DNA-binding domain-containing protein           |
| NW338_12040 | 95   | 0    | 99   | 0    | 0    | 0    | 23  | 0   | 0    | 0    | 278  | 0    | 0    | 239  | 202  | 304  | .                          | DUF3021 domain-containing protein                            |
| NW338_12045 | 262  | 327  | 377  | 445  | 387  | 407  | 394 | 323 | 1464 | 2472 | 1173 | 942  | 1323 | 1108 | 1540 | 1057 | mgo                        | malate dehydrogenase (quinone)                               |
| NW338_12050 | 1074 | 910  | 1108 | 1040 | 736  | 1143 | 667 | 624 | 657  | 503  | 994  | 931  | 1625 | 2016 | 2268 | 2569 | .                          | L-lactate permease                                           |
| NW338_12055 | 0    | 118  | 60   | 64   | 69   | 52   | 157 | 43  | 179  | 58   | 76   | 266  | 109  | 55   | 315  | 146  | .                          | CDP-glycerol glycerophosphotransferase family protein        |
| NW338_12060 | 1308 | 1098 | 714  | 683  | 1066 | 568  | 653 | 393 | 1448 | 2422 | 885  | 1119 | 477  | 1143 | 292  | 1161 | .                          | hypothetical protein                                         |
| NW338_12065 | 0    | 0    | 37   | 36   | 0    | 0    | 0   | 0   | 114  | 127  | 0    | 0    | 0    | 0    | 178  | 94   | .                          | GNAT family N-acetyltransferase                              |
| NW338_12070 | 43   | 29   | 49   | 39   | 114  | 132  | 256 | 101 | 0    | 80   | 210  | 80   | 82   | 51   | 0    | 147  | .                          | oxidoreductase                                               |
| NW338_12075 | 71   | 151  | 64   | 116  | 190  | 249  | 377 | 503 | 0    | 203  | 158  | 0    | 0    | 34   | 0    | 88   | .                          | GNAT family N-acetyltransferase                              |
| NW338_12080 | 127  | 31   | 47   | 135  | 195  | 79   | 186 | 11  | 0    | 0    | 0    | 0    | 34   | 26   | 0    | 66   | .                          | NAD(P)/FAD-dependent oxidoreductase                          |
| NW338_12090 | 66   | 111  | 293  | 134  | 89   | 296  | 24  | 98  | 0    | 37   | 501  | 117  | 709  | 252  | 0    | 409  | .                          | DUF2871 domain-containing protein                            |
| NW338_12095 | 0    | 0    | 15   | 15   | 30   | 0    | 24  | 7   | 92   | 25   | 69   | 0    | 28   | 32   | 0    | 14   | .                          | YhgE/Pip domain-containing protein                           |
| NW338_12105 | 46   | 17   | 52   | 81   | 67   | 42   | 97  | 22  | 175  | 172  | 94   | 166  | 455  | 481  | 389  | 331  | .                          | magnesium transporter CorA family protein                    |
| NW338_12110 | 99   | 148  | 220  | 95   | 117  | 169  | 43  | 114 | 228  | 22   | 191  | 213  | 49   | 137  | 496  | 285  | .                          | sucrose-specific PTS transporter subunit IIBC                |
| NW338_12115 | 0    | 182  | 245  | 0    | 65   | 0    | 0   | 76  | 1480 | 846  | 1820 | 723  | 772  | 2402 | 1171 | 1428 | .                          | YbgA family protein                                          |
| NW338_12120 | 13   | 26   | 18   | 23   | 54   | 13   | 41  | 18  | 107  | 8    | 71   | 62   | 39   | 31   | 44   | 45   | rsp                        | AraC family transcriptional regulator Rsp                    |
| NW338_12125 | 509  | 68   | 92   | 93   | 368  | 375  | 122 | 367 | 550  | 190  | 611  | 306  | 418  | 621  | 617  | 258  | .                          | pyridoxamine 5'-phosphate oxidase family protein             |
| NW338_12130 | 381  | 241  | 501  | 129  | 107  | 177  | 87  | 33  | 504  | 1512 | 295  | 961  | 1173 | 4557 | 1476 | 3185 | .                          | DUF4889 domain-containing protein                            |
| NW338_12135 | 159  | 292  | 265  | 161  | 415  | 592  | 303 | 242 | 169  | 278  | 270  | 78   | 513  | 177  | 204  | 223  | .                          | cation:dicarboxylase symporter family transporter            |
| NW338_12140 | 78   | 0    | 81   | 0    | 68   | 115  | 28  | 0   | 135  | 114  | 138  | 0    | 0    | 0    | 0    | 83   | .                          | DUF3139 domain-containing protein                            |
| NW338_12145 | 457  | 384  | 182  | 255  | 283  | 732  | 261 | 303 | 136  | 645  | 0    | 952  | 1043 | 1006 | 569  | 668  | .                          | MarR family transcriptional regulator                        |
| NW338_12150 | 342  | 74   | 45   | 44   | 89   | 101  | 224 | 123 | 412  | 75   | 0    | 188  | 335  | 1213 | 210  | 151  | .                          | Hsp20/alpha crystallin family protein                        |
| NW338_12155 | 24   | 131  | 42   | 119  | 162  | 221  | 109 | 37  | 199  | 278  | 277  | 181  | 451  | 342  | 236  | 159  | .                          | NarK/NasA family nitrate transporter                         |
| NW338_12170 | 350  | 361  | 183  | 167  | 303  | 235  | 16  | 106 | 443  | 288  | 97   | 201  | 235  | 732  | 813  | 860  | nreC                       | nitrate respiration regulation response regulator NreC       |
| NW338_12175 | 519  | 640  | 446  | 415  | 276  | 393  | 211 | 325 | 262  | 172  | 250  | 118  | 142  | 155  | 346  | 225  | nreB                       | nitrate respiration regulation sensor histidine kinase NreB  |
| NW338_12180 | 0    | 471  | 295  | 230  | 110  | 371  | 91  | 143 | 0    | 215  | 195  | 178  | 245  | 378  | 203  | 744  | nreA                       | nitrate respiration regulation accessory nitrate sensor NreA |
| NW338_12185 | 196  | 99   | 125  | 236  | 99   | 246  | 188 | 118 | 343  | 118  | 62   | 0    | 69   | 252  | 0    | 216  | narI                       | respiratory nitrate reductase subunit gamma                  |
| NW338_12190 | 124  | 99   | 101  | 73   | 66   | 54   | 18  | 51  | 91   | 0    | 150  | 88   | 460  | 415  | 302  | 651  | narJ                       | nitrate reductase molybdenum cofactor assembly               |
| NW338_12195 | 112  | 272  | 246  | 204  | 64   | 147  | 97  | 104 | 111  | 124  | 54   | 116  | 359  | 466  | 660  | 585  | narH                       | chaperone                                                    |
| NW338_12200 | 221  | 177  | 158  | 190  | 126  | 175  | 121 | 117 | 210  | 146  | 133  | 255  | 324  | 298  | 444  | 309  | .                          | nitrate reductase subunit alpha                              |
| NW338_12205 | 150  | 176  | 112  | 100  | 159  | 263  | 130 | 136 | 283  | 257  | 373  | 126  | 463  | 241  | 519  | 195  | cobA                       | uroporphyrinogen-III C-methyltransferase                     |
| NW338_12210 | 90   | 262  | 0    | 359  | 335  | 588  | 595 | 228 | 192  | 0    | 140  | 0    | 674  | 561  | 1673 | 529  | nirD                       | nitrite reductase small subunit NirD                         |
| NW338_12215 | 99   | 156  | 131  | 140  | 264  | 151  | 146 | 163 | 144  | 133  | 105  | 227  | 245  | 287  | 143  | 219  | nirB                       | nitrite reductase large subunit NirB                         |
| NW338_12220 | 0    | 39   | 35   | 0    | 34   | 0    | 0   | 0   | 0    | 66   | 59   | 32   | 251  | 35   | 0    | 40   | .                          | sirohdrochlorin chelatase                                    |
| NW338_12225 | 0    | 0    | 0    | 69   | 46   | 11   | 291 | 70  | 0    | 30   | 78   | 139  | 0    | 146  | 0    | 24   | .                          | GNAT family N-acetyltransferase                              |
| NW338_12235 | 69   | 73   | 23   | 158  | 305  | 240  | 227 | 63  | 127  | 168  | 0    | 91   | 356  | 178  | 205  | 132  | .                          | formate/nitrite transporter family protein                   |
| NW338_1     |      |      |      |      |      |      |     |     |      |      |      |      |      |      |      |      |                            |                                                              |

|               |       |       |       |       |       |       |       |      |       |       |       |       |       |       |       |             |               |                                                                             |
|---------------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------------|---------------|-----------------------------------------------------------------------------|
| NW338_12315   | 578   | 274   | 573   | 315   | 128   | 640   | 338   | 156  | 675   | 743   | 592   | 919   | 1782  | 1408  | 1908  | 1251        | .             | 2;3-diphosphoglycerate-dependent phosphoglycerate mutase                    |
| NW338_12320   | 0     | 0     | 0     | 0     | 122   | 21    | 0     | 27   | 0     | 0     | 102   | 65    | 0     | 0     | 0     | 0           | .             | cation diffusion facilitator family transporter                             |
| NW338_12330   | 558   | 610   | 880   | 1015  | 2958  | 1292  | 1783  | 1359 | 646   | 1344  | 1684  | 1916  | 10632 | 13533 | 18261 | 3519        | <i>sbi</i>    | immunoglobulin-binding protein Sbi                                          |
| NW338_12335   | 316   | 352   | 310   | 227   | 182   | 29    | 22    | 92   | 1454  | 796   | 1364  | 2004  | 500   | 402   | 95    | 622         | <i>hlgA</i>   | bi-component gamma-hemolysin HlgAB subunit A                                |
| NW338_12340   | 404   | 383   | 484   | 910   | 107   | 49    | 151   | 434  | 239   | 69    | 181   | 338   | 267   | 288   | 0     | 162         | <i>hlgC</i>   | bi-component gamma-hemolysin HlgCB subunit C                                |
| NW338_12345   | 870   | 837   | 761   | 1138  | 78    | 119   | 187   | 141  | 343   | 589   | 351   | 553   | 367   | 767   | 272   | 406         | <i>hlgB</i>   | bi-component gamma-hemolysin HlgAB/HlgCB subunit B                          |
| NW338_12350   | 0     | 0     | 0     | 0     | 0     | 13    | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 141         | .             | QueT transporter family protein                                             |
| NW338_12355   | 0     | 41    | 0     | 0     | 0     | 0     | 0     | 14   | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | .             | 6-carboxyhexanoate--CoA ligase                                              |
| NW338_12360   | 0     | 14    | 0     | 0     | 0     | 0     | 9     | 0    | 0     | 0     | 0     | 0     | 0     | 12    | 0     | 27          | .             | pyridoxal phosphate-dependent aminotransferase family protein               |
| NW338_12365   | 0     | 10    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 13          | <i>bioB</i>   | biotin synthase BioB                                                        |
| NW338_12370   | 0     | 0     | 0     | 10    | 0     | 15    | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | <i>bioA</i>   | adenosylmethionine--8-amino-7-oxononanoate transaminase                     |
| NW338_12375   | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 37          | <i>bioD</i>   | dethiobiotin synthase                                                       |
| NW338_12385   | 0     | 0     | 0     | 11    | 0     | 0     | 44    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | .             | ABC transporter ATP-binding protein/permease                                |
| NW338_12390   | 0     | 9     | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 53    | 0     | 0     | 0           | .             | ABC transporter ATP-binding protein/permease                                |
| NW338_12400   | 0     | 25    | 0     | 30    | 273   | 0     | 0     | 0    | 0     | 108   | 0     | 0     | 133   | 0     | 46    | <i>gtbA</i> | flippase GtbA |                                                                             |
| NW338_12405   | 25    | 184   | 99    | 41    | 22    | 95    | 9     | 35   | 143   | 57    | 0     | 135   | 365   | 370   | 80    | 343         | .             | glycerate kinase                                                            |
| NW338_12410   | 43    | 39    | 74    | 73    | 0     | 81    | 94    | 127  | 258   | 990   | 323   | 605   | 871   | 256   | 551   | .           | .             | hypothetical protein                                                        |
| NW338_12415   | 59    | 31    | 135   | 113   | 87    | 82    | 117   | 35   | 148   | 53    | 280   | 83    | 160   | 177   | 143   | 212         | .             | multidrug efflux MFS transporter                                            |
| NW338_12420   | 0     | 0     | 0     | 0     | 0     | 43    | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | .             | GyrI-like domain-containing protein                                         |
| NW338_12425   | 109   | 406   | 425   | 587   | 172   | 457   | 170   | 215  | 92    | 738   | 708   | 847   | 252   | 207   | 913   | 645         | .             | C39 family peptidase                                                        |
| NW338_12430   | 35    | 0     | 84    | 60    | 83    | 15    | 119   | 0    | 138   | 0     | 212   | 193   | 0     | 0     | 0     | 99          | .             | metallophosphoesterase                                                      |
| NW338_12435   | 94    | 54    | 18    | 47    | 161   | 70    | 0     | 21   | 121   | 122   | 119   | 36    | 137   | 235   | 65    | 289         | .             | amino acid permease                                                         |
| NW338_12440   | 67    | 40    | 68    | 76    | 51    | 57    | 183   | 71   | 54    | 15    | 81    | 36    | 119   | 112   | 535   | 169         | .             | sodium:proton antiporter                                                    |
| NW338_12445   | 73    | 50    | 214   | 232   | 459   | 303   | 374   | 277  | 0     | 81    | 70    | 67    | 380   | 768   | 1163  | 506         | .             | APC family permease                                                         |
| NW338_12450   | 81    | 47    | 60    | 49    | 17    | 28    | 7     | 37   | 39    | 71    | 129   | 82    | 48    | 36    | 0     | 95          | .             | serine hydrolase FLP                                                        |
| NW338_12455   | 0     | 104   | 76    | 210   | 79    | 108   | 291   | 260  | 0     | 396   | 52    | 116   | 0     | 16    | 108   | 0           | .             | NAD(P)-dependent oxidoreductase                                             |
| NW338_12460   | 46    | 58    | 157   | 99    | 94    | 212   | 298   | 256  | 0     | 0     | 0     | 0     | 119   | 0     | 98    | 113         | .             | 2-dehydropantoate 2-reductase                                               |
| NW338_12465   | 33    | 55    | 55    | 88    | 45    | 135   | 184   | 133  | 0     | 0     | 0     | 40    | 25    | 58    | 186   | 102         | .             | MFS transporter                                                             |
| NW338_12470   | 0     | 69    | 154   | 173   | 152   | 83    | 87    | 231  | 160   | 355   | 455   | 339   | 68    | 172   | 0     | 185         | .             | ABC transporter permease                                                    |
| NW338_12475   | 92    | 155   | 166   | 270   | 147   | 185   | 161   | 259  | 0     | 0     | 44    | 0     | 0     | 14    | 98    | 14          | .             | osmoprotectant ABC transporter substrate-binding protein                    |
| NW338_12480   | 0     | 0     | 61    | 58    | 245   | 52    | 406   | 80   | 0     | 25    | 0     | 79    | 0     | 0     | 0     | 40          | .             | ABC transporter permease                                                    |
| NW338_12485   | 61    | 55    | 89    | 190   | 200   | 126   | 109   | 232  | 86    | 0     | 0     | 86    | 0     | 11    | 0     | 62          | .             | ABC transporter ATP-binding protein                                         |
| NW338_12500   | 77    | 0     | 43    | 190   | 0     | 44    | 17    | 47   | 98    | 0     | 0     | 0     | 0     | 0     | 0     | 121         | .             | Ydel family protein                                                         |
| NW338_12505   | 61    | 91    | 79    | 61    | 103   | 141   | 87    | 205  | 0     | 0     | 26    | 64    | 147   | 25    | 372   | 40          | .             | APC family permease                                                         |
| NW338_12510   | 325   | 287   | 288   | 170   | 285   | 98    | 45    | 69   | 78    | 12    | 204   | 328   | 390   | 432   | 453   | 240         | .             | carboxylesterase/lipase family protein                                      |
| NW338_12515   | 73    | 13    | 38    | 43    | 21    | 53    | 136   | 212  | 0     | 178   | 169   | 199   | 40    | 23    | 293   | 68          | .             | MFS transporter                                                             |
| NW338_12520   | 56    | 82    | 101   | 120   | 0     | 8     | 0     | 0    | 76    | 84    | 135   | 0     | 310   | 352   | 0     | 180         | <i>fetB</i>   | iron export ABC transporter permease subunit FetB                           |
| NW338_12525   | 70    | 149   | 0     | 112   | 0     | 0     | 0     | 30   | 79    | 0     | 63    | 113   | 338   | 62    | 262   | 240         | .             | ATP-binding cassette domain-containing protein                              |
| NW338_12530   | 150   | 201   | 166   | 370   | 246   | 173   | 142   | 333  | 56    | 107   | 0     | 47    | 132   | 136   | 651   | 113         | .             | M42 family metallopeptidase                                                 |
| NW338_12545   | 479   | 552   | 121   | 301   | 55    | 271   | 45    | 480  | 632   | 856   | 1923  | 935   | 0     | 293   | 1124  | 190         | .             | DUF1307 domain-containing protein                                           |
| NW338_12555   | 38    | 21    | 26    | 18    | 0     | 0     | 0     | 0    | 70    | 21    | 56    | 33    | 47    | 0     | 0     | 0           | .             | hypothetical protein                                                        |
| NW338_12560   | 0     | 21    | 63    | 82    | 0     | 103   | 9     | 58   | 0     | 27    | 0     | 82    | 0     | 43    | 0     | 76          | .             | MFS transporter                                                             |
| NW338_12565   | 38    | 34    | 113   | 93    | 0     | 33    | 41    | 16   | 0     | 0     | 0     | 75    | 0     | 0     | 0     | 147         | .             | ABC transporter ATP-binding protein                                         |
| NW338_12570   | 0     | 31    | 24    | 77    | 0     | 0     | 0     | 14   | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 98          | .             | ABC transporter ATP-binding protein                                         |
| NW338_12575   | 0     | 11    | 22    | 22    | 29    | 14    | 0     | 23   | 0     | 0     | 0     | 0     | 0     | 0     | 106   | 113         | .             | ABC transporter permease                                                    |
| NW338_12580   | 46    | 27    | 31    | 40    | 72    | 22    | 0     | 52   | 0     | 0     | 0     | 78    | 177   | 14    | 0     | 79          | .             | ABC transporter permease                                                    |
| NW338_12585   | 18    | 68    | 44    | 96    | 24    | 42    | 101   | 123  | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 69          | <i>cntA</i>   | staphylopine-dependent metal ABC transporter substrate-binding protein CntA |
| NW338_12590   | 0     | 22    | 0     | 11    | 0     | 5     | 24    | 16   | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | <i>cntM</i>   | staphylopine dehydrogenase CntM                                             |
| NW338_12595   | 0     | 0     | 0     | 0     | 0     | 8     | 0     | 24   | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | <i>cntL</i>   | D-histidine (S)-2-aminobutanoyltransferase CntL                             |
| NW338_12600   | 0     | 12    | 0     | 28    | 0     | 15    | 25    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | <i>cntK</i>   | histidine racemase CntK                                                     |
| NW338_12610   | 122   | 229   | 55    | 128   | 283   | 280   | 50    | 91   | 64    | 210   | 105   | 121   | 0     | 130   | 207   | 37          | .             | SDR family oxidoreductase                                                   |
| NW338_12615   | 18    | 41    | 71    | 33    | 32    | 84    | 83    | 54   | 0     | 0     | 0     | 0     | 46    | 207   | 0     | 52          | .             | AbgT family transporter                                                     |
| NW338_12620   | 314   | 165   | 107   | 89    | 159   | 156   | 49    | 67   | 1340  | 1258  | 950   | 594   | 280   | 728   | 435   | 604         | .             | carboxymuconolactone decarboxylase family protein                           |
| NW338_12625   | 0     | 23    | 169   | 0     | 0     | 15    | 193   | 143  | 0     | 39    | 260   | 181   | 0     | 0     | 0     | 115         | .             | DUF1433 domain-containing protein                                           |
| NW338_12645   | 211   | 229   | 163   | 177   | 383   | 324   | 148   | 242  | 87    | 71    | 64    | 0     | 0     | 172   | 0     | 185         | .             | SDR family oxidoreductase                                                   |
| NW338_12650   | 0     | 135   | 0     | 131   | 360   | 22    | 37    | 42   | 790   | 351   | 0     | 525   | 0     | 1394  | 1801  | 509         | .             | single-stranded DNA-binding protein                                         |
| NW338_12660   | 59254 | 46499 | 49847 | 26846 | 39520 | 23088 | 23106 | 6907 | 12095 | 13382 | 20841 | 21876 | 3622  | 5410  | 12737 | 11128       | .             | hypothetical protein                                                        |
| NW338_12670   | 0     | 0     | 32    | 34    | 413   | 324   | 13    | 114  | 0     | 154   | 0     | 0     | 0     | 0     | 0     | 0           | .             | tandem-type lipoprotein                                                     |
| NW338_12715   | 0     | 15    | 29    | 18    | 104   | 37    | 4     | 27   | 0     | 6     | 0     | 20    | 84    | 19    | 93    | 27          | .             | DUF3427 domain-containing protein                                           |
| NW338_12720   | 0     | 0     | 0     | 0     | 0     | 16    | 26    | 101  | 0     | 0     | 106   | 0     | 0     | 305   | 0     | 0           | .             | (deoxy)nucleoside triphosphate pyrophosphohydrolase                         |
| NW338_12725   | 73    | 62    | 25    | 45    | 37    | 63    | 0     | 33   | 0     | 9     | 24    | 40    | 106   | 190   | 142   | 48          | .             | phospho-sugar mutase                                                        |
| NW338_12730   | 0     | 0     | 0     | 0     | 0     | 76    | 0     | 0    | 227   | 60    | 0     | 280   | 0     | 0     | 634   | 48          | .             | hypothetical protein                                                        |
| NW338_12735   | 0     | 0     | 0     | 45    | 0     | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0           | .             | hypothetical protein                                                        |
| NW338_12765   | 107   | 143   | 30    | 51    | 193   | 209   | 233   | 97   | 136   | 0     | 121   | 56    | 0     | 106   | 0     | 0           | <i>galU</i>   | UTP--glucose-1-phosphate uridylyltransferase GalU                           |
| NW338_12775   | 54    | 19    | 167   | 118   | 73    | 9     | 132   | 198  | 206   | 95    | 96    | 319   | 350   | 219   | 304   | 149         | <i>fnbA</i>   | fibronectin-binding protein FnbA                                            |
| NW338_12785   | 500   | 590   | 136   | 290   | 73    | 154   | 246   | 121  | 83    | 24    | 96    | 55    | 247   | 447   | 320   | 517         | .             | gluconate:H <sup>+</sup> symporter                                          |
| NW338_12790   | 94    | 137   | 130   | 75    | 260   | 195   | 52    | 104  | 73    | 79    | 28    | 52    | 46    | 110   | 0     | 292         | <i>gntK</i>   | gluconokinase                                                               |
| NW338_12795   | 195   | 70    | 28    | 178   | 298   | 462   | 104   | 62   | 0     | 133   | 93    | 0     | 105   | 20    | 0     | 123         | .             | GntR family transcriptional regulator                                       |
| NW338_12800   | 425   | 100   | 311   | 233   | 246   | 294   | 265   | 120  | 479   | 704   | 471   | 746   | 460   | 573   | 221   | 324         | .             | MerR family transcriptional regulator                                       |
| NW338_12805   | 278   | 184   | 84    | 90    | 169   | 107   | 15    | 31   | 172   | 23    | 185   | 106   | 160   | 39    | 0     | 116         | .             | GTP pyrophosphokinase family protein                                        |
| NW338_12810   | 222   | 419   | 279   | 188   | 60    | 453   | 305   | 353  | 126   | 592   | 212   | 0     | 256   | 130   | 0     | 177         | .             | DUF2188 domain-containing protein                                           |
| NW338_12815   | 39    | 5     | 0     | 60    | 275   | 161   | 84    | 176  | 99    | 108   | 174   | 109   | 75    | 73    | 225   | 27          | .             | FUSC family protein                                                         |
| NW338_12820   | 112   | 135   | 89    | 162   | 481   | 487   | 183   | 137  | 47    | 153   | 385   | 59    | 636   | 481   | 352   | 605         | .             | MFS transporter                                                             |
| NW338_12825   | 141   | 0     | 170   | 79    | 151   | 44    | 0     | 66   | 86    | 107   | 240   | 0     | 77    | 258   | 300   | 0           | .             | DedA family protein                                                         |
| NW338_12830   | 41    | 132   | 0     | 83    | 55    | 69    | 15    | 17   | 0     | 0     | 0     | 0     | 682   | 605   | 0     | 333         | .             | ATP-binding cassette domain-containing protein                              |
| NW338_12835   | 0     | 49    | 160   | 93    | 0     | 184   | 0     | 50   | 0     | 0     | 82    | 32    | 153   | 275   | 676   | 96          | .             | ABC transporter permease                                                    |
| NW338_12840   | 348   | 233   | 399   | 263   | 58    | 208   | 268   | 273  | 150   | 142   | 175   | 184   | 109   | 176   | 133   | 343         | .             | fructose-1,6-bisphosphatase                                                 |
| NW338_12845   | 40    | 0     | 42    | 24    | 94    | 86    | 159   | 111  | 0     | 46    | 116   | 271   | 110   | 243   | 322   | 52          | .             | hypothetical protein                                                        |
| NW338_12850   | 0     | 0     | 98    | 47    | 42    | 197   | 162   | 261  | 0     | 0     | 0     | 41    | 0     | 22    | 0     | 50          | .             | alpha/beta hydrolase                                                        |
| NW338_12855   | 0     | 0     | 20    | 26    | 79    | 83    | 0     | 106  | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 26          | .             | ring-cleaving dioxygenase                                                   |
| NW338_12860   | 107   | 124   | 187   | 240   | 367   | 309   | 325   | 98   | 0     | 0     | 96    | 172   | 0     | 31    | 0     | 59          | .             | MarR family transcriptional regulator                                       |
| NW338_12865</ |       |       |       |       |       |       |       |      |       |       |       |       |       |       |       |             |               |                                                                             |

|             |      |      |      |      |       |       |      |       |       |       |       |       |      |      |      |       |                                                                                        |
|-------------|------|------|------|------|-------|-------|------|-------|-------|-------|-------|-------|------|------|------|-------|----------------------------------------------------------------------------------------|
| NW338_12930 | 168  | 247  | 329  | 190  | 167   | 417   | 129  | 226   | 56    | 63    | 141   | 47    | 45   | 200  | 88   | 88    | PTS fructose transporter subunit IIC                                                   |
| NW338_12935 | 0    | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 231  | 385  | 830  | 356   | hypothetical protein                                                                   |
| NW338_12940 | 0    | 0    | 55   | 39   | 0     | 35    | 75   | 43    | 121   | 87    | 0     | 86    | 0    | 0    | 0    | 69    | DMT family transporter                                                                 |
| NW338_12945 | 119  | 433  | 1041 | 809  | 139   | 249   | 274  | 538   | 223   | 251   | 369   | 733   | 444  | 222  | 533  | 390   | alpha/beta hydrolase                                                                   |
| NW338_12950 | 217  | 267  | 647  | 593  | 379   | 281   | 409  | 376   | 170   | 45    | 838   | 210   | 0    | 228  | 0    | 162   | thioexodioxin family protein                                                           |
| NW338_12955 | 105  | 217  | 251  | 254  | 0     | 141   | 528  | 201   | 0     | 0     | 309   | 649   | 0    | 125  | 224  | 43    | acyl-CoA thioesterase                                                                  |
| NW338_12960 | 45   | 76   | 123  | 76   | 51    | 69    | 151  | 116   | 59    | 0     | 40    | 54    | 182  | 183  | 124  | 134   | ptsG glucose-specific PTS transporter subunit IIBC                                     |
| NW338_12965 | 138  | 199  | 293  | 295  | 642   | 382   | 615  | 1373  | 293   | 278   | 235   | 150   | 382  | 391  | 53   | 189   | pyruvate oxidase                                                                       |
| NW338_12970 | 41   | 78   | 65   | 131  | 92    | 144   | 599  | 558   | 1270  | 486   | 0     | 71    | 659  | 596  | 385  | 370   | LrgB family protein                                                                    |
| NW338_12975 | 0    | 0    | 0    | 70   | 0     | 51    | 130  | 78    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 90    | cidA holin-like murein hydrolase modulator CidA                                        |
| NW338_12980 | 49   | 11   | 88   | 0    | 129   | 144   | 98   | 51    | 69    | 18    | 0     | 113   | 126  | 58   | 0    | 97    | LysR family transcriptional regulator                                                  |
| NW338_12985 | 8142 | 8014 | 9238 | 6386 | 14463 | 14469 | 8361 | 11944 | 31164 | 27074 | 14534 | 22562 | 7214 | 6008 | 5514 | 12222 | sterile alpha motif-like domain-containing protein                                     |
| NW338_12990 | 0    | 0    | 0    | 0    | 0     | 0     | 24   | 0     | 0     | 114   | 0     | 169   | 109  | 63   | 213  | 41    | CHAP domain-containing protein                                                         |
| NW338_12995 | 78   | 130  | 45   | 45   | 142   | 351   | 293  | 175   | 41    | 83    | 65    | 0     | 332  | 609  | 782  | 583   | hydroxymethylglutaryl-CoA reductase; degradative                                       |
| NW338_13005 | 1006 | 526  | 868  | 964  | 73    | 227   | 280  | 185   | 101   | 0     | 80    | 108   | 371  | 360  | 0    | 266   | methylated-DNA-[protein]-cysteine S-methyltransferase                                  |
| NW338_13010 | 942  | 881  | 649  | 535  | 185   | 93    | 87   | 102   | 291   | 468   | 161   | 421   | 289  | 449  | 413  | 492   | clpL ATP-dependent Clp protease ATP-binding subunit ClpL                               |
| NW338_13015 | 0    | 93   | 0    | 0    | 0     | 0     | 60   | 116   | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0     | FeoB-associated Cys-rich membrane protein                                              |
| NW338_13025 | 0    | 70   | 0    | 61   | 0     | 54    | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 56    | ferrous iron transport protein A                                                       |
| NW338_13030 | 0    | 0    | 10   | 0    | 74    | 42    | 37   | 82    | 42    | 0     | 0     | 0     | 0    | 0    | 0    | 0     | fatty acid efflux MMPL transporter FarE                                                |
| NW338_13035 | 0    | 29   | 0    | 97   | 136   | 22    | 19   | 64    | 0     | 0     | 0     | 0     | 0    | 0    | 308  | 111   | farR fatty acid efflux pump transcriptional regulator FarR                             |
| NW338_13045 | 757  | 588  | 788  | 535  | 221   | 234   | 184  | 213   | 462   | 717   | 461   | 623   | 591  | 942  | 1605 | 894   | pruA L-glutamate gamma-semialdehyde dehydrogenase                                      |
| NW338_13055 | 0    | 0    | 0    | 120  | 0     | 0     | 0    | 165   | 3087  | 2284  | 2581  | 2313  | 950  | 1230 | 0    | 510   | cwrA cell wall inhibition responsive protein CwrA                                      |
| NW338_13065 | 138  | 616  | 748  | 560  | 555   | 807   | 1221 | 1174  | 1338  | 710   | 1653  | 471   | 1872 | 1353 | 444  | 3467  | copZ copper chaperone CopZ                                                             |
| NW338_13070 | 268  | 172  | 143  | 95   | 106   | 80    | 96   | 73    | 61    | 190   | 44    | 81    | 141  | 267  | 0    | 291   | D-lactate dehydrogenase                                                                |
| NW338_13075 | 114  | 160  | 172  | 106  | 171   | 88    | 79   | 103   | 96    | 0     | 36    | 65    | 81   | 47   | 80   | 118   | aminotransferase class I/II-fold pyridoxal phosphate-dependent enzyme                  |
| NW338_13080 | 104  | 129  | 30   | 71   | 42    | 99    | 57   | 27    | 70    | 65    | 42    | 128   | 24   | 77   | 0    | 32    | NAD(P)/FAD-dependent oxidoreductase                                                    |
| NW338_13085 | 206  | 151  | 30   | 48   | 29    | 21    | 0    | 11    | 70    | 0     | 0     | 0     | 0    | 31   | 196  | 44    | phytoene/squalene synthase family protein                                              |
| NW338_13090 | 127  | 110  | 60   | 72   | 0     | 23    | 9    | 0     | 93    | 95    | 37    | 88    | 73   | 36   | 150  | 11    | 4:4'-diaponeurosporenoate glycosyltransferase crtQ                                     |
| NW338_13095 | 62   | 30   | 20   | 62   | 33    | 4     | 0    | 0     | 75    | 32    | 42    | 124   | 103  | 69   | 0    | 49    | NAD(P)/FAD-dependent oxidoreductase                                                    |
| NW338_13100 | 117  | 91   | 40   | 57   | 0     | 0     | 0    | 0     | 228   | 0     | 91    | 306   | 0    | 0    | 0    | 0     | crtO glycosyl-4:4'-diaponeurosporenoate acyltransferase                                |
| NW338_13105 | 0    | 0    | 0    | 0    | 0     | 54    | 14   | 16    | 147   | 139   | 0     | 97    | 61   | 0    | 0    | 23    | CHAP domain-containing protein                                                         |
| NW338_13110 | 40   | 55   | 52   | 41   | 128   | 173   | 201  | 101   | 606   | 347   | 355   | 360   | 26   | 74   | 51   | 34    | acetyltransferase                                                                      |
| NW338_13120 | 62   | 127  | 240  | 499  | 325   | 609   | 1551 | 1200  | 1034  | 1353  | 515   | 1103  | 1372 | 1159 | 771  | 1253  | isaA lytic transglycosylase IsaA                                                       |
| NW338_13125 | 44   | 9    | 120  | 400  | 0     | 23    | 49   | 125   | 0     | 0     | 0     | 0     | 0    | 26   | 0    | 12    | PTS transporter subunit IIC                                                            |
| NW338_13135 | 0    | 0    | 0    | 0    | 0     | 47    | 106  | 0     | 0     | 0     | 0     | 0     | 0    | 87   | 0    | 0     | TetR/AcrR family transcriptional regulator                                             |
| NW338_13140 | 59   | 93   | 1514 | 1365 | 0     | 25    | 2884 | 4191  | 0     | 0     | 1029  | 771   | 0    | 42   | 1114 | 119   | hypothetical protein                                                                   |
| NW338_13145 | 247  | 0    | 2934 | 1475 | 0     | 0     | 5546 | 5659  | 262   | 69    | 4108  | 3189  | 0    | 59   | 6422 | 5481  | DUF896 domain-containing protein                                                       |
| NW338_13160 | 0    | 0    | 0    | 0    | 0     | 0     | 0    | 63    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0     | DUF2316 family protein                                                                 |
| NW338_13170 | 61   | 36   | 69   | 125  | 0     | 9     | 0    | 181   | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0     | SDR family NAD(P)-dependent oxidoreductase                                             |
| NW338_13180 | 263  | 84   | 169  | 193  | 136   | 111   | 12   | 155   | 199   | 148   | 409   | 498   | 129  | 144  | 617  | 109   | alpha/beta hydrolase                                                                   |
| NW338_13185 | 0    | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 70   | 99   | 14    | GTP-binding protein                                                                    |
| NW338_13195 | 0    | 14   | 0    | 10   | 0     | 0     | 9    | 0     | 0     | 96    | 0     | 0     | 0    | 0    | 83   | 0     | NAD(P)-binding domain-containing protein                                               |
| NW338_13200 | 0    | 54   | 0    | 47   | 0     | 0     | 0    | 0     | 0     | 54    | 0     | 0     | 0    | 0    | 0    | 0     | DUF4176 domain-containing protein                                                      |
| NW338_13210 | 0    | 0    | 0    | 0    | 0     | 57    | 28   | 54    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0     | hypothetical protein                                                                   |
| NW338_13215 | 0    | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 0     | 0     | 202   | 0    | 0    | 0    | 0     | TIGR04197 family type VII secretion effector                                           |
| NW338_13220 | 86   | 121  | 79   | 27   | 44    | 75    | 139  | 91    | 61    | 291   | 395   | 289   | 150  | 332  | 307  | 485   | fructosamine kinase family protein                                                     |
| NW338_13225 | 80   | 36   | 61   | 85   | 344   | 372   | 58   | 80    | 163   | 245   | 143   | 422   | 144  | 161  | 86   | 95    | quinone-dependent dihydroorotate dehydrogenase                                         |
| NW338_13230 | 0    | 0    | 0    | 152  | 139   | 269   | 150  | 214   | 0     | 354   | 152   | 366   | 403  | 49   | 0    | 295   | hypothetical protein                                                                   |
| NW338_13235 | 0    | 57   | 130  | 73   | 34    | 63    | 57   | 44    | 0     | 159   | 0     | 67    | 294  | 132  | 0    | 123   | epoxyqueuosine reductase QueH                                                          |
| NW338_13240 | 166  | 121  | 143  | 67   | 167   | 359   | 955  | 600   | 3447  | 3335  | 3007  | 2321  | 2059 | 2091 | 957  | 1927  | glyoxalase/bleomycin resistance/extradiol dioxygenase family protein                   |
| NW338_13245 | 145  | 16   | 0    | 32   | 0     | 0     | 0    | 56    | 309   | 27    | 179   | 309   | 160  | 87   | 0    | 30    | TetR/AcrR family transcriptional regulator                                             |
| NW338_13250 | 0    | 34   | 44   | 7    | 15    | 18    | 6    | 29    | 0     | 0     | 26    | 14    | 28   | 39   | 0    | 18    | CocE/NonD family hydrolase                                                             |
| NW338_13260 | 0    | 0    | 178  | 132  | 65    | 117   | 251  | 294   | 0     | 42    | 0     | 0     | 0    | 204  | 0    | 79    | aspartate 1-decarboxylase                                                              |
| NW338_13265 | 0    | 146  | 126  | 144  | 248   | 266   | 582  | 471   | 0     | 19    | 0     | 0     | 261  | 201  | 204  | 143   | panC pantoate-beta-alanine ligase                                                      |
| NW338_13270 | 53   | 39   | 60   | 86   | 262   | 119   | 254  | 389   | 0     | 0     | 0     | 197   | 0    | 276  | 638  | 90    | panB 3-methyl-2-oxobutanate hydroxymethyltransferase                                   |
| NW338_13275 | 0    | 22   | 52   | 0    | 203   | 485   | 24   | 94    | 68    | 286   | 100   | 94    | 225  | 1223 | 107  | 191   | oxidoreductase                                                                         |
| NW338_13280 | 163  | 307  | 192  | 256  | 71    | 46    | 351  | 149   | 0     | 152   | 149   | 69    | 51   | 77   | 0    | 173   | budA acetolactate decarboxylase                                                        |
| NW338_13285 | 2803 | 1719 | 2681 | 1847 | 1022  | 847   | 688  | 1072  | 468   | 441   | 423   | 408   | 800  | 591  | 725  | 936   | L-lactate dehydrogenase                                                                |
| NW338_13290 | 20   | 88   | 280  | 275  | 204   | 137   | 332  | 267   | 150   | 11    | 31    | 35    | 207  | 276  | 117  | 65    | amino acid permease                                                                    |
| NW338_13295 | 56   | 19   | 41   | 121  | 79    | 85    | 224  | 153   | 0     | 73    | 47    | 0     | 80   | 0    | 0    | 68    | aspartate aminotransferase family protein                                              |
| NW338_13300 | 0    | 0    | 0    | 0    | 0     | 0     | 0    | 0     | 0     | 126   | 196   | 0     | 0    | 113  | 0    | 31    | hypothetical protein                                                                   |
| NW338_13305 | 2213 | 1773 | 1957 | 2041 | 2601  | 3335  | 2904 | 2676  | 831   | 414   | 888   | 431   | 160  | 445  | 809  | 522   | fructose biphosphate aldolase                                                          |
| NW338_13310 | 3938 | 4527 | 3686 | 4219 | 4099  | 3810  | 3543 | 4466  | 1930  | 2325  | 1543  | 1960  | 5474 | 5161 | 5280 | 4370  | lqo L-lactate dehydrogenase (quinone)                                                  |
| NW338_13320 | 387  | 315  | 620  | 467  | 615   | 451   | 819  | 585   | 145   | 164   | 347   | 185   | 330  | 236  | 170  | 277   | AMP-binding protein                                                                    |
| NW338_13325 | 169  | 158  | 168  | 142  | 112   | 14    | 0    | 21    | 1122  | 996   | 663   | 182   | 356  | 214  | 0    | 455   | antibiotic biosynthesis monooxygenase                                                  |
| NW338_13330 | 0    | 0    | 0    | 153  | 316   | 58    | 0    | 0     | 232   | 208   | 237   | 167   | 305  | 0    | 0    | 0     | sterile alpha motif-like domain-containing protein                                     |
| NW338_13335 | 0    | 21   | 0    | 0    | 22    | 36    | 53   | 7     | 0     | 9     | 37    | 33    | 21   | 16   | 0    | 10    | betA choline dehydrogenase                                                             |
| NW338_13340 | 0    | 19   | 17   | 0    | 0     | 14    | 51   | 21    | 0     | 11    | 0     | 38    | 0    | 9    | 0    | 0     | betB betaine-aldehyde dehydrogenase                                                    |
| NW338_13350 | 51   | 124  | 0    | 0    | 89    | 144   | 107  | 91    | 0     | 0     | 74    | 43    | 83   | 0    | 0    | 0     | GbsR/MarR family transcriptional regulator                                             |
| NW338_13355 | 0    | 6    | 30   | 0    | 0     | 15    | 32   | 43    | 37    | 86    | 0     | 96    | 22   | 8    | 0    | 16    | BCCT family transporter                                                                |
| NW338_13370 | 505  | 255  | 392  | 310  | 350   | 957   | 327  | 498   | 1669  | 2670  | 1584  | 2293  | 66   | 121  | 315  | 182   | nrdG anaerobic ribonucleoside-triphosphate reductase                                   |
| NW338_13375 | 464  | 341  | 366  | 143  | 444   | 526   | 300  | 304   | 207   | 284   | 138   | 299   | 0    | 85   | 91   | 108   | nrdD anaerobic ribonucleoside-triphosphate reductase                                   |
| NW338_13380 | 0    | 0    | 0    | 0    | 77    | 20    | 8    | 9     | 0     | 0     | 0     | 0     | 162  | 10   | 0    | 0     | CitMHS family transporter                                                              |
| NW338_13390 | 71   | 241  | 75   | 211  | 296   | 84    | 51   | 265   | 86    | 26    | 0     | 83    | 0    | 45   | 0    | 111   | NAD(P)-binding protein                                                                 |
| NW338_13395 | 23   | 122  | 84   | 127  | 87    | 74    | 98   | 147   | 59    | 0     | 23    | 66    | 94   | 155  | 0    | 16    | assimilatory sulfite reductase (NADPH) flavoprotein subunit                            |
| NW338_13405 | 57   | 19   | 0    | 154  | 0     | 25    | 0    | 62    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0     | glutathione peroxidase                                                                 |
| NW338_13420 | 52   | 16   | 39   | 28   | 51    | 23    | 73   | 25    | 56    | 33    | 21    | 0     | 55   | 14   | 0    | 13    | ABC transporter permease                                                               |
| NW338_13425 | 0    | 0    | 73   | 18   | 0     | 71    | 14   | 0     | 0     | 21    | 55    | 0     | 0    | 141  | 0    | 23    | ABC transporter ATP-binding protein                                                    |
| NW338_13430 | 0    | 68   | 0    | 52   | 43    | 74    | 85   | 71    | 0     | 0     | 0     | 0     | 125  | 15   | 0    | 0     | nsaS nisin susceptibility-associated two-component system sensor histidine kinase NsaS |
| NW338_13435 | 43   | 43   | 58   | 69   | 37    | 144   | 153  | 72    | 0     | 136   | 66    | 112   | 0    | 20   | 0    | 0     | nsaR nisin susceptibility-associated two-component system response regulator NsaR      |
| NW338_13440 | 0    | 0    | 321  | 0    | 335   | 132   | 103  | 47    | 0     | 0     | 0     | 0     | 0    | 0    | 0    | 0     | hypothetical protein                                                                   |
| NW338_13445 | 30   | 0    | 0    | 0    | 47    | 4     | 0    | 0     | 0     | 11    | 29    | 0     | 0    | 0    | 0    | 0     | alkaline phosphatase                                                                   |
| NW338_13455 | 95   | 84   | 129  | 102  | 286   | 14    | 132  | 113   | 0     | 0     | 92    | 164   | 0    | 310  | 335  | 0     | MarR family winged helix-turn-helix transcriptional regulator                          |
| NW338_13460 | 112  | 13   | 64   | 88   | 0     | 122   | 13   | 76    | 0     | 0     | 0     | 32    | 123  | 67   | 0    |       |                                                                                        |

|             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                     |                                                                                                   |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------------------------|---------------------------------------------------------------------------------------------------|
| NW338_13485 | 1397 | 1074 | 623  | 828  | 1262 | 1048 | 643  | 684  | 444  | 646  | 1157 | 714  | 128  | 118  | 263  | 201  | <i>argF</i>                         | ornithine carbamoyltransferase                                                                    |
| NW338_13490 | 1218 | 757  | 702  | 744  | 244  | 364  | 168  | 300  | 234  | 335  | 626  | 649  | 124  | 277  | 712  | 178  | <i>arcA</i>                         | arginine deiminase                                                                                |
| NW338_13500 | 0    | 85   | 0    | 0    | 85   | 73   | 46   | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .                                   | arginine repressor                                                                                |
| NW338_13505 | 105  | 83   | 63   | 41   | 1774 | 1118 | 369  | 497  | 0    | 10   | 0    | 33   | 0    | 0    | 0    | 0    | <i>aur</i>                          | zinc metalloproteinase aureolysin                                                                 |
| NW338_13510 | 1104 | 748  | 374  | 692  | 1079 | 1090 | 202  | 268  | 440  | 213  | 358  | 1005 | 0    | 0    | 0    | 0    | <i>isaB</i>                         | immunodominant staphylococcal antigen IsaB                                                        |
| NW338_13515 | 0    | 21   | 0    | 0    | 0    | 139  | 0    | 58   | 0    | 102  | 0    | 0    | 0    | 30   | 0    | 0    | .                                   | hypothetical protein                                                                              |
| NW338_13520 | 30   | 68   | 100  | 0    | 49   | 25   | 0    | 0    | 28   | 0    | 0    | 40   | 0    | 36   | 0    | 62   | .                                   | BglG family transcription antiterminator                                                          |
| NW338_13525 | 659  | 757  | 353  | 306  | 1018 | 1263 | 576  | 627  | 0    | 80   | 32   | 95   | 336  | 274  | 218  | 155  | .                                   | PTS fructose transporter subunit IIA <sub>BC</sub>                                                |
| NW338_13535 | 258  | 274  | 231  | 161  | 266  | 280  | 199  | 172  | 93   | 85   | 63   | 33   | 168  | 98   | 57   | 129  | .                                   | YhgE/Pip domain-containing protein                                                                |
| NW338_13540 | 227  | 199  | 225  | 394  | 255  | 243  | 181  | 338  | 60   | 118  | 127  | 93   | 237  | 388  | 533  | 276  | .                                   | amidase domain-containing protein                                                                 |
| NW338_13545 | 338  | 131  | 388  | 211  | 317  | 282  | 129  | 302  | 0    | 0    | 153  | 87   | 480  | 24   | 0    | 172  | .                                   | cysteine hydrolase                                                                                |
| NW338_13550 | 103  | 113  | 75   | 79   | 102  | 95   | 83   | 138  | 95   | 26   | 46   | 99   | 241  | 120  | 137  | 70   | <i>sasF</i>                         | cell-wall-anchored protein SasF                                                                   |
| NW338_13555 | 119  | 171  | 36   | 81   | 46   | 164  | 38   | 24   | 45   | 12   | 0    | 18   | 242  | 158  | 263  | 190  | <i>gtfB</i>                         | accessory Sec system glycosylation chaperone GtfB                                                 |
| NW338_13560 | 29   | 133  | 90   | 28   | 153  | 88   | 47   | 33   | 40   | 60   | 71   | 33   | 183  | 106  | 0    | 121  | <i>gtfA</i>                         | accessory Sec system glycosyltransferase GtfA                                                     |
| NW338_13565 | 148  | 81   | 84   | 124  | 139  | 141  | 117  | 82   | 25   | 20   | 79   | 45   | 101  | 81   | 71   | 97   | <i>secA2</i>                        | accessory Sec system translocase SecA2                                                            |
| NW338_13570 | 104  | 20   | 0    | 0    | 104  | 6    | 89   | 0    | 0    | 0    | 0    | 0    | 37   | 0    | 0    | 64   | <i>asp3</i>                         | accessory Sec system protein Asp3                                                                 |
| NW338_13575 | 36   | 103  | 0    | 52   | 0    | 56   | 20   | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 9    | <i>asp2</i>                         | accessory Sec system protein Asp2                                                                 |
| NW338_13580 | 85   | 12   | 29   | 25   | 0    | 24   | 7    | 39   | 0    | 0    | 28   | 0    | 0    | 0    | 0    | 11   | <i>asp1</i>                         | accessory Sec system protein Asp1                                                                 |
| NW338_13585 | 23   | 0    | 16   | 0    | 0    | 17   | 0    | 0    | 0    | 41   | 0    | 0    | 0    | 0    | 0    | 25   | <i>secY2</i>                        | accessory Sec system protein translocase subunit SecY2                                            |
| NW338_13590 | 192  | 168  | 147  | 130  | 130  | 106  | 32   | 59   | 28   | 46   | 42   | 55   | 31   | 37   | 14   | 25   | <i>sasA</i>                         | serine-rich repeat glycoprotein adhesin SasA                                                      |
| NW338_13595 | 62   | 14   | 136  | 114  | 0    | 40   | 31   | 17   | 85   | 46   | 0    | 0    | 0    | 0    | 0    | 0    | .                                   | flavin reductase family protein                                                                   |
| NW338_13615 | 47   | 31   | 0    | 0    | 63   | 34   | 0    | 0    | 0    | 0    | 0    | 40   | 0    | 0    | 0    | 58   | .                                   | flavin reductase family protein                                                                   |
| NW338_13620 | 0    | 0    | 0    | 0    | 0    | 43   | 0    | 0    | 0    | 0    | 0    | 51   | 0    | 0    | 0    | 0    | .                                   | peptide-methionine (S)-S-oxide reductase                                                          |
| NW338_13625 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .                                   | GNAT family N-acetyltransferase                                                                   |
| NW338_13630 | 0    | 0    | 0    | 0    | 0    | 0    | 78   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .                                   | tyrosine-protein phosphatase                                                                      |
| NW338_13635 | 0    | 0    | 37   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 64   | 0    | 0    | 0    | 0    | 0    | .                                   | polysaccharide biosynthesis tyrosine autokinase                                                   |
| NW338_13640 | 0    | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .                                   | Wzz/FepE/Etk N-terminal domain-containing protein                                                 |
| NW338_13645 | 51   | 131  | 191  | 128  | 68   | 58   | 432  | 72   | 0    | 29   | 149  | 43   | 536  | 164  | 0    | 351  | <i>icaR</i>                         | ica operon transcriptional regulator IcaR                                                         |
| NW338_13650 | 35   | 26   | 16   | 0    | 51   | 106  | 126  | 26   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>icaA</i>                         | poly-beta-1,6 N-acetyl-D-glucosamine synthase IcaA                                                |
| NW338_13655 | 0    | 52   | 0    | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>icaD</i>                         | intracellular adhesion protein IcaD                                                               |
| NW338_13670 | 605  | 443  | 245  | 337  | 600  | 373  | 87   | 157  | 300  | 305  | 377  | 227  | 158  | 149  | 128  | 77   | <i>lip1</i>                         | YSIRK domain-containing triacylglycerol lipase Lip1                                               |
| NW338_13680 | 0    | 7    | 14   | 92   | 0    | 71   | 181  | 192  | 0    | 120  | 0    | 0    | 0    | 18   | 0    | 0    | <i>hisF</i>                         | imidazole glycerol phosphate synthase subunit HisF                                                |
| NW338_13685 | 0    | 0    | 27   | 233  | 0    | 0    | 283  | 218  | 0    | 23   | 119  | 0    | 67   | 0    | 0    | 121  | <i>hisA</i>                         | 1-(5-phosphoribosyl)-5-((5-phosphoribosylamino)methylideneamino)imidazole-4-carboxamide isomerase |
| NW338_13690 | 0    | 0    | 67   | 116  | 0    | 11   | 18   | 110  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 31   | <i>hisH</i>                         | imidazole glycerol phosphate synthase subunit HisH                                                |
| NW338_13695 | 0    | 0    | 0    | 296  | 0    | 46   | 89   | 94   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>hisB</i>                         | imidazoleglycerol-phosphate dehydratase HisB                                                      |
| NW338_13700 | 0    | 0    | 57   | 188  | 25   | 6    | 115  | 101  | 0    | 16   | 0    | 0    | 0    | 0    | 0    | 0    | .                                   | histidinol-phosphate aminotransferase family protein                                              |
| NW338_13705 | 37   | 0    | 60   | 132  | 20   | 48   | 202  | 217  | 0    | 0    | 0    | 0    | 0    | 0    | 73   | 0    | <i>hisD</i>                         | histidinol dehydrogenase                                                                          |
| NW338_13710 | 0    | 16   | 42   | 45   | 172  | 10   | 230  | 177  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>hisG</i>                         | ATP phosphoribosyltransferase                                                                     |
| NW338_13715 | 0    | 31   | 55   | 96   | 30   | 50   | 180  | 112  | 0    | 0    | 0    | 0    | 43   | 0    | 0    | 22   | .                                   | ATP phosphoribosyltransferase regulatory subunit                                                  |
| NW338_13720 | 42   | 60   | 0    | 60   | 56   | 73   | 9    | 10   | 47   | 14   | 0    | 0    | 0    | 0    | 0    | 64   | .                                   | polysaccharide deacetylase family protein                                                         |
| NW338_13750 | 1995 | 2080 | 4335 | 3565 | 179  | 152  | 314  | 342  | 305  | 588  | 380  | 284  | 69   | 79   | 0    | 217  | .                                   | YceI family protein                                                                               |
| NW338_13755 | 44   | 102  | 30   | 62   | 26   | 6    | 11   | 12   | 0    | 16   | 0    | 77   | 0    | 14   | 0    | 26   | .                                   | SMP-30/gluconolactonase/LRE family protein                                                        |
| NW338_13760 | 0    | 60   | 51   | 136  | 40   | 13   | 122  | 91   | 63   | 0    | 180  | 184  | 37   | 0    | 13   | .    | rhodanese-related sulfurtransferase |                                                                                                   |
| NW338_13765 | 0    | 0    | 0    | 0    | 0    | 19   | 0    | 31   | 0    | 0    | 0    | 0    | 0    | 21   | 0    | 86   | <i>pcp</i>                          | pyroglutamyl-peptidase I                                                                          |
| NW338_13780 | 0    | 0    | 0    | 0    | 54   | 189  | 0    | 20   | 0    | 69   | 180  | 0    | 101  | 29   | 0    | 118  | <i>bstA</i>                         | bacillithiol transferase BstA                                                                     |
| NW338_13785 | 343  | 368  | 157  | 233  | 257  | 266  | 29   | 130  | 231  | 428  | 418  | 149  | 223  | 147  | 0    | 194  | .                                   | anion permease                                                                                    |
| NW338_13790 | 0    | 0    | 21   | 100  | 42   | 57   | 0    | 91   | 0    | 0    | 0    | 0    | 52   | 15   | 101  | 0    | <i>rarD</i>                         | EamA family transporter RarD                                                                      |
| NW338_13795 | 155  | 0    | 0    | 20   | 0    | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | .                                   | DNA-binding protein                                                                               |
| NW338_13800 | 70   | 0    | 25   | 18   | 100  | 51   | 90   | 30   | 0    | 32   | 41   | 24   | 43   | 0    | 0    | 0    | .                                   | HoxN/HupN/NixA family nickel/cobalt transporter                                                   |
| NW338_13810 | 1369 | 552  | 360  | 249  | 49   | 260  | 40   | 46   | 2511 | 1652 | 907  | 2948 | 1130 | 2065 | 1545 | 2449 | .                                   | HdeD family acid-resistance protein                                                               |
| NW338_13815 | 0    | 13   | 0    | 0    | 0    | 0    | 27   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>vraD</i>                         | peptide resistance ABC transporter ATP-binding subunit VraD                                       |
| NW338_13820 | 0    | 0    | 0    | 20   | 0    | 35   | 5    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 9    | <i>vraE</i>                         | peptide resistance ABC transporter permease subunit VraE                                          |
| NW338_13825 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 4503 | 2930 | 4668 | 3631 | 0    | 0    | 0    | 0    | <i>vraH</i>                         | peptide resistance ABC transporter activity modulator VraH                                        |
| NW338_13855 | 3006 | 4280 | 4222 | 5289 | 8161 | 8921 | 4161 | 4046 | 6314 | 7406 | 3834 | 5147 | 6231 | 4224 | 1372 | 5765 | .                                   | cold-shock protein                                                                                |
| NW338_13865 | 0    | 105  | 114  | 0    | 0    | 16   | 26   | 24   | 0    | 0    | 0    | 0    | 0    | 398  | 0    | 0    | .                                   | DUF3147 family protein                                                                            |
| NW338_13870 | 0    | 27   | 164  | 0    | 406  | 284  | 29   | 27   | 0    | 0    | 361  | 0    | 0    | 0    | 0    | 36   | .                                   | DUF3147 family protein                                                                            |
| NW338_13880 | 79   | 115  | 90   | 68   | 0    | 66   | 112  | 190  | 0    | 22   | 0    | 0    | 204  | 167  | 0    | 177  | <i>rsmG</i>                         | 16S rRNA (guanine(527)-N(7))-methyltransferase RsmG                                               |
| NW338_13885 | 234  | 120  | 109  | 156  | 47   | 64   | 135  | 177  | 28   | 8    | 22   | 90   | 0    | 89   | 98   | 98   | <i>mnmG</i>                         | tRNA uridine-5-carboxymethylaminomethyl(34) synthesis enzyme MnmG                                 |
| NW338_13890 | 125  | 60   | 0    | 80   | 67   | 148  | 89   | 120  | 87   | 0    | 0    | 76   | 106  | 77   | 67   | 31   | <i>mnmE</i>                         | tRNA uridine-5-carboxymethylaminomethyl(34) synthesis GTPase MnmE                                 |
| NW338_13895 | 0    | 0    | 0    | 78   | 0    | 59   | 58   | 60   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | <i>rnpA</i>                         | ribonuclease P protein component                                                                  |
| NW338_13900 | 1169 | 1639 | 1317 | 2260 | 1308 | 1071 | 2604 | 1587 | 8113 | 5490 | 4899 | 4754 | 4895 | 2106 | 2453 | 3938 | <i>rpmH</i>                         | 50S ribosomal protein L34                                                                         |