

## DATA SET S2

Sequences and alignment of contigs harboring the *mcr-9.1* genes

>NXJN01000053.1 Enterobacter hormaechei strain ST-234:K063

NODE\_53\_length\_2661\_cov\_38.7403, whole genome shotgun sequence

```
AGTACCAGCGTACGGCCACAGAATGATGTCACGCTGAAAATGCCGGCCTTTGAATGGGTTTCATGTGCAG
CTCCATCAGCAAAAGGGGATGATAAGTTTATCACACCAGACTATTTGCAACAGTGCCTCTACTCTTGCCA
CAGGTTTACGAGTAGGTGATTTGGGAGGAAGCGTCTTAGCCTTTGAAGTTGGCGGAAGGAGAGAATGGC
ACTCCGTGCAACGCATTAATTACCGGGATATCCGCCATCACCTACTTGCGCCTGTGTGTACCATTTTCAT
CAGCTCTGCAGTTCCTCGGCTCGTTTTCGGCGGGGGCCCATGGGGCGGCATCTTGATCAGCAACAGGCTGG
TACCTACCGTGTTTTACCTCAAAAATAACGCCGCCTTCATCCAGTGACAATACGGTATGCCAGGTGCCTG
CATCCATCTCCAGCACTTTACAGTCTCACCTAACACGACGCGCTGGGTCAGGTTACCCAGGTCATCAAA
GTTCAATACCAAAAAGCGACCGGTAAGGGATGTCAGCAGTTCAAAAGTATGCCGGTGGCGATGAGGGCGA
ACATAAGTTCCCGTTCCATAGCAATAGCCAGACGCTGCACCGGGTCGCTCAATTCAGGGTGGAAAATTAT
GATGGGCACGTAAGCGGGGGGAATTTGCGGCTTGTCGCTTTGCTTGCCTAGGTCGTTGAAAGTAAGTTG
TTTCATATTATAAGCCTTATTGCATTCTTGCAGCTTACGGCAACCAGGTTGCCGTAAGGCTTTTTGTAT
ACTAACAAATCGATTAGCCACGGCATTTCGCGGAACAAATCGCGGTCAGGATTATAGACGCTGGTGCTTACG
TCCCACAGCCCCAAAATCGATGAGAACAGGTTGTCGTGGGAATATGATTTTTTCGCCGATTATTTTCAA
GGCAAGACATGTTGATGTGTTTCCCGGCGATAAAGCCCGGTGACATCCAGACCTGCATCGGAATATGCGT
CTGCTGATCCGGTGCCAGTTTGTACGGCGTGCCGTGCAGATATAGCCCGCTTCGCCCAATGATTCACCA
TGATCGGACACATAAAGCAGCACGGTGTGACTGATCGCTGTAATTTTTAGCTTTTCAATCATCTCAG
CTAATACATAGTCTGTATAACGAAGGGTGTGTCGTAGGTGTTGACCAATTGTTCTGAGTACAGTTTTTC
GATATCGCTACGTGCACATTCGGGCATGAAGTGGCGATGCTCAGCCGATAACGCAGGTAATAAGTCGGT
CCATGGCTGCCAATGATATGGAAGGCGACAAGCTTATCACCTGGCATTTCGGCGATTCATCATCAAGGT
TTTTCCAGCATCACCTCGTCATGGCACGTTTTGCCATCGCACAGTTTCGGGTTATCACTAGGCTTAATTC
GACAGTCGGGATGCGGCTACATACGCCTTTACAACCGCATCGTTCTCTTTCCATAACAGCGAGACACCG
GTTTTCTGCACGATGTCGAGGAAATTTCACTGTTAGATGCTTTTTTACTGTCGTAICTGGTGCGATTCA
TATTCGAGAACATGCACGGAACGGATATTGCGGTAGCGGTACCGCAGGAATGCATATTTTTAAACGAAAT
AACGCCGCCGATTTGCTGGTAAAGGCATTGGTATCACGCGAATAACCGTTCATCGAGAAATTCTGGCTG
CGTGCCGTTTTCCCAATCACAGGAACATCAGCGTGGGTTTTTCGTGAGCGACGACGCGTTTAGCATCAT
TCCCAGCGTCTGGAAAGGCACTTTAGTCGTAAAGTACGTATCCTTAACATACTGGAAAGTGCTGTAAGC
```

GTAGTTCGCCGGGATGATCTCTTTATTCAATGTCGAGTTATTGCGGCCGACAGAGGCATAATCCTGATAA  
TAAAGTGCGGCAACACCTGCAATCAAACCAACGATGCCAGCACGGAGAGCAAACGGTAAGCAATGCCTT  
TATACCATTTTTTCAGGATATTGAATTTTTATTGAAAAAGGAGGATGGCAGGAAGGATACCGGTAAAGAC  
GAACCATATAATAATTGAGCCATTAAGATAGGAATGCGCTTCTGGGGGTTAGTTTCAATAATGTTTTGA  
ATCATCGTTTGATCAAACATTACTTTATATTTTAGTGTGAATAACTGACCAGTGAGCCAGTGATAAACA  
GTAAAGCAAAGAAAGGTTTCAGCAGAAAACGAACTGAGAAAGGCATAAAAAACAACGTTAAGCGCCGCAAC  
CAGAACAAAGGGAATAGAAATGACAAAACCAATTTTGACATGCTCTAAATGCGACAAAATCTCGTAAAAA  
TGCAGCAATATTGGCCAGTTAAGTAAAAACGCAAAGATCATTGCCAGAAGTAAAACCAGCGGAATAACTT  
TCACCCTGAAAAGTACAGGCATTAACACCTCCGGAAAATAGTAAACCAGTAAAACATTGATGATAATTA  
CAACAATTCAATCTAATATTATGATTGCCTTATTGCTGCAAAGCAGAGATTATCATTCTGAAATCTTAG  
GTTAACCTTAACGAGGCTTTGTTGAATAAATCAGATTCGGGTAAGTCTCCCCGTAGCGGGTTGTGTTT  
TCAGGCAATACGCACGCTTTCAGGCATACCTGCTTTCGTCATTTTGTTCAGCGCTCGTACCAGGGCCATA  
G

>NXJH01000131.1 *Enterobacter hormaechei* strain KOO6 NODE\_136\_length\_2489\_cov\_45.375252,  
whole genome shotgun sequence

GGCCTTTGAATGGGTTTCATGTGCAGCTCCATCAGCAAAGGGGATGATAAGTTTATCACCACCGACTATT  
TGCAACAGTGCCTCTACTCTTGCCACAGGTTTACGAGTAGGTGATTTGGGAGGAAGCGTCTTAGCCTTTG  
AAGTTGGCGCGAAGGAGAGAATGGCACTCCGTGCAACGCATTAATTACCGCGGATATCCGCCATCACCTA  
CTTGCGCCTGTGTGTACCATTTTCATCAGCTCTGCAGTTCCCGGCTCGTTTTCGGCGGGGGCCCATGGGGC  
GGCATCTTGATCAGCAACAGGCTGGTACCTACCGTGTTTTACCTCAAAAATAACGCCGCTTCATCCAGT  
GACAATACGGTATGCCAGGTGCCTGCATCCATCTCCAGCACTTACAGTCCTCACCTAACACGACGCGCT  
GGGTCAGGTTACCCAGGTCATCAAAGTTCAATACCAAAAAGCGACCGGTAAGGGATGTCAGCAGTTCAAA  
AGTATGCGGGTGGCGATGAGGGCGAACATAAGTTCCCGGTTCCATAGCAATAGCCAGACGCTGCACCGGG  
TCGCTCAATTCAGGGTGGAATTATGATGGGCACGTAAGCGGGGGGAATTTGCGGCTTGTGCGCTTTGCT  
TGCGTAGGTCGTTGAAAGTAAGTTGTTTCATATTATAAGCCTTATTGCATTCTTGCAGCTTACGGCAACC  
AGGTTGCCGTAAGGCTTTTTGTTATACTAACAATCGATTAGCCACGGCATTGCGGGAACAAATCGCGGTC  
AGGATTATAGACGCTGGTGCTTACGTCCCACAGCCCCAAAATCGATGAGAACAGGTTGTCGTGGGAATAT

GATTTTTTCGCCGCATTATTTTCAAGGCAAGACATGTTGATGTGTTTTCCCGGCGATAAAGCCCCGGTGACA  
TCCAGACCTGCATCGGAATATGCGTCTGCTGATCCGGTGCCAGTTTGTACGGCGTGCCGTGCAGATATAG  
CCCGCTTTCGCCCAATGATTCACCATGATCGGACACATAAAGCAGCACGGTGTGTAAGTGCATCGCTGTAA  
TTTTTTAGCTTTTCAATCATCTCAGCTAATACATAGTCTGTATAACGAAGGGTGTGTCGTAGGTGTGA  
CCAATTGTTCTGAGTACAGTTTTTCGATATCGCTACGTGCACATTCGGGCATGAAGTGGCGATGCTCAGC  
CGGATAACGCAGGTAATAAGTCGGTCCATGGCTGCCAATGATATGGAAGGCGACAAGCTTATCACCTGGC  
ATTTTGGCGATTTTCATCATCAAGGTTTTCCAGCATCACCTCGTCATGGCACGTTTTGCCATCGCACAGTT  
TCGGGTTATCACTAGGCTTAATTTTCGACAGTCGGGATGCGGCTACATACGCCTTTACAACCGCCATCGTT  
CTCTTCCATAACAGCGAGACACCGGTTTTCTGCACGATGTGAGGAAATTTTCACTGTTAGATGCTTTT  
TTACTGTCGTAAGTCCGGTGCATTATTCGAGAACATGCACGGAACGGATATTGCGGTAGCGGTACCGC  
AGGAATGCATATTTTTAAACGAAATAACGCCCGCGATTGCTGGTAAAGGCATTGGTATCACGCGAATA  
ACCGTTCATCGAGAAATTCTGGCTGCGTGCCGTTTTGCCAATCACCAGGAACATCAGCGTGGGTTTTTCG  
TGAGCGACGACGCGTTTAGCATCATTCCCAGCGTCTGGAAAGGCACTTTAGTCGTAAGTACGTATCCT  
TAACATACTGGAAAGTGCTGTAAGCGTAGTTCGCCGGGATGATCTCTTTATTCAATGTGAGTTATTGCG  
GCCGACAGAGGCATAATCCTGATAATAAAGTGGGCAACACCTGCAATCAAACCTCAACGATGCCAGCACG  
GAGAGCAAACGGTAAGCAATGCCTTTATACCATTTTTTCAGGATATTGAATTTTTATTGAAAAAAGGAGGA  
TGGCAGGAAGGATACCGGTAAAGACGAACCATATAATAATTGAGCCATTAAGATAGGAATGCGCTTCTCTG  
GGGGTTAGTTTCAATAATGTTTTGAATCATCGTTTGATCAAACATTACTTTATATTTTAGTGTGCAATAA  
CTGACCAGTGAGCCAGTGATAAACAGTAAAGCAAAGAAAGGTTTTCAGCAGAAAACGAACTGAGAAAAGGCA  
TAAAAACAACGTTAAGCGCCGCAACCAGAACAAAGGGAATAGAAATGACAAAACCAATTTTGACATGCTC  
TAAATGCGACAAAATCTCGTAAAAATGCAGCAATATTGGCCAGTTAAGTAAAAACGCAAAGATCATTGCC  
AGAAGTAAAACCGCGGAATAACTTTACCCTGAAAAGTACAGGCATTAACACCTCCGGAAAATAGTAAA  
CCAGTAAAAACATTGATGATAATTACAACAATTCAATCTAATATTATGATTGCCTTATTGCTGCAAAGC  
AGAGATTATCATTCTGAAATCTTAGGTTAACCTAACGAGGCTTTGTTGAATAAATCAGATTTCCGGGTAA  
GTCTCCCCGTAGCGGGTGTGTTTTAGGCAATACGCACGCTTTCAGGCA

>NXK001000060.1 *Enterobacter hormaechei* strain K130 NODE\_60\_length\_2517\_cov\_51.84, whole genome shotgun sequence

CCATCAGCAAAGGGGATGATAAGTTTATCACCACCGACTATTTGCAACAGTGCCTCTACTCTTGCCACA

GGTTTACGAGTAGGTGATTTGGGAGGAAGCGTCTTAGCCTTTGAAGTTGGCGCGAAGGAGAGAATGGCAC  
TCCGTGCAACGCATTAATTACCGCGGATATCCGCCATCACCTACTTGCGCCTGTGTGTACCATTTTCATCA  
GCTCTGCAGTTCCTCGGCTCGTTTTCGGCGGGGGCCCATGGGGCGGCATCTTGATCAGCAACAGGCTGGTA  
CCTACCGTGTTCCTCAAAAATAACGCCGCCTTCATCCAGTGACAATACGGTATGCCAGGTGCCTGCA  
TCCATCTCCAGCACTTTACAGTCTCACCTAACACGACGCGCTGGGTGAGGTTACCCAGGTCATCAAAGT  
TCAATACCAAAAAGCGACCGGTAAGGGATGTCAGCAGTTCAAAAGTATGCGGGTGGCGATGAGGGCGAAC  
ATAAGTTCCTCGGTTCCATAGCAATAGCCAGACGCTGCACCGGGTCGCTCAATTCAGGGTGGAAATTATGA  
TGGGCACGTAAGCGGGGGGAATTTGCGGCTTGTCGCTTTGCTTGCCTAGGTCGTTGAAAGTAAGTTGTT  
TCATATTATAAGCCTTATTGCATTCTGCAGCTTACGGCAACCAGGTTGCCGTAAGGCTTTTTGTTATAC  
TAACAATCGATTAGCCACGGCATTTCGCGGAACAAATCGCGGTGAGGATTATAGACGCTGGTGCTTACGTC  
CCACAGCCCCAAAATCGATGAGAACAGGTTGTCGTGGGAATATGATTTTTTCGCCGATTATTTTCAAGG  
CAAGACATGTTGATGTGTTTTCCCGGCGATAAAGCCCGGTGACATCCAGACCTGCATCGGAATATGCGTCT  
GCTGATCCGGTGCCAGTTTGTACGGCGTGCCGTGCAGATATAGCCCGCTTTCGCCAATGATTCACCATG  
ATCGGACACATAAAGCAGCACGGTGTTGACTGATCGCTGTAATTTTTAGCTTTTCAATCATCTCAGCT  
AATACATAGTCTGTATAACGAAGGGTGTGTCGTAGGTGTTGACCAATTGTTCTGAGTACAGTTTTCGA  
TATCGCTACGTGCACATTCGGGCATGAAGTGGCGATGCTCAGCCGATAACGCAGGTAATAAGTCGGTCC  
ATGGCTGCCAATGATATGGAAGGCGACAAGCTTATCACCTGGCATTTTGGCGATTCATCATCAAGGTTT  
TCCAGCATCACCTCGTCATGGCACGTTTTGCCATCGCACAGTTTCGGGTTATCACTAGGCTTAATTTTGA  
CAGTCGGGATGCGGCTACATACGCCTTTACAACCGCCATCGTTCTTTCCATAACAGCGAGACACCGGT  
TTTCTGCACGATGTCGAGGAAATTTTCACTGTTAGATGCTTTTTTACTGTCGTAICTGGTGCGATTTCATA  
TTCGAGAACATGCACGGAACGGATATTGCGGTAGCGGTACCGCAGGAATGCATATTTTTAAACGAAATAA  
CGCCGCCGGATTTGCTGGTAAAGGCATTGGTATCACGCGAATAACCGTTCATCGAGAAATTCTGGCTGCG  
TGCCGTTTCGCCAATCACCAGGAACATCAGCGTGGGTTTTTCGTGAGCGACGACGCGTTTAGCATCATTC  
CCCAGCGTCTGGAAAGGCACTTTAGTCGTAAAGTACGTATCCTTAACATACTGGAAAGTGCTGTAAGCGT  
AGTTCGCCGGGATGATCTCTTTATTCAATGTCGAGTTATTGCGGCCGACAGAGGCATAATCCTGATAATA  
AAGTGCGGCAACACCTGCAATCAAACCTCAACGATGCCAGCACGGAGAGCAAACGGTAAGCAATGCCTTTA  
TACCATTTTTCAGGATATTGAATTTTTATTGAAAAAGGAGGATGGCAGGAAGGATACCGGTAAAGACGA  
ACCATATAATAATTGAGCCATTAAGATAGGAATGCGCTTCTGGGGGTTAGTTTCAATAATGTTTTGAAT  
CATCGTTTGATCAAACATTACTTTATTTTTAGTGTCGAATAACTGACCAGTGAGCCAGTGATAACAGT  
AAAGCAAAGAAAGGTTTCAGCAGAAAACGAACTGAGAAAGGCATAAAAAACAACGTTAAGCGCCGCAACCA  
GAACAAAGGGAATAGAAATGACAAAACCAATTTTGACATGCTCTAAATGCGACAAAATCTCGTAAAAATG

CAGCAATATTGGCCAGTTAAGTAAAAACGCAAAGATCATTGCCAGAAGTAAAACCAGCGGAATAACTTTC  
ACCCTGAAAAGTACAGGCATTAACACCTCCGAAAATAGTAAACCAGTAAAAACATTGATGATAATTACA  
ACAATTCAATCTAATATTATGATTGCCTTATTTCGCTGCAAAGCAGAGATTATCATTCTGAAATCTTAGGT  
TAACCTTAACGAGGCTTTGTTGAATAAATCAGATTTCCGGTAAAGTCTCCCCGTAGCGGGTTGTGT

CLUSTAL format alignment by MAFFT (v7.452)

NXJN0100053.1 agtaccagcgtacggcccacagaatgatgtcacgctgaaaatccggcctttgaatgggt  
NXJH01000131.1 -----ggcctttgaatgggt  
NXKO0100060.1 -----

NXJN0100053.1 tcatgtgcagctccatcagcaaaaggggatgataagttatcaccaccgactatttcaa  
NXJH01000131.1 tcatgtgcagctccatcagcaaaaggggatgataagttatcaccaccgactatttcaa  
NXKO0100060.1 -----ccatcagcaaaaggggatgataagttatcaccaccgactatttcaa

\*\*\*\*\*

NXJN0100053.1 cagtgcctctactcttgccacaggtttacgagtaggtgatttgggaggaagcgtcttagc  
NXJH01000131.1 cagtgcctctactcttgccacaggtttacgagtaggtgatttgggaggaagcgtcttagc  
NXKO0100060.1 cagtgcctctactcttgccacaggtttacgagtaggtgatttgggaggaagcgtcttagc

\*\*\*\*\*

NXJN0100053.1 ctttgaagttggcggaaggagagaatggcactccgtgcaacgcattaattaccgcgat  
NXJH01000131.1 ctttgaagttggcggaaggagagaatggcactccgtgcaacgcattaattaccgcgat  
NXKO0100060.1 ctttgaagttggcggaaggagagaatggcactccgtgcaacgcattaattaccgcgat

\*\*\*\*\*

NXJN0100053.1 atccgcatcacctacttgcgcctgtgtgtaccatttcatcagctctcagttcccggct

NXJH01000131.1 atccgcatcacctacttgcgcctgtgtgtaccatttcatcagctctgcagttcccggct

NXKO01000060.1 atccgcatcacctacttgcgcctgtgtgtaccatttcatcagctctgcagttcccggct

\*\*\*\*\*

NXJN01000053.1 cgttttcggcggggcccatggggcggcatcttgatcagcaacaggctggtacctaccgt

NXJH01000131.1 cgttttcggcggggcccatggggcggcatcttgatcagcaacaggctggtacctaccgt

NXKO01000060.1 cgttttcggcggggcccatggggcggcatcttgatcagcaacaggctggtacctaccgt

\*\*\*\*\*

NXJN01000053.1 gttttacctcaaaaataacgcccttcatccagtacaatacgggatgccaggtgcctg

NXJH01000131.1 gttttacctcaaaaataacgcccttcatccagtacaatacgggatgccaggtgcctg

NXKO01000060.1 gttttacctcaaaaataacgcccttcatccagtacaatacgggatgccaggtgcctg

\*\*\*\*\*

NXJN01000053.1 catccatctccagcactttacagtcctcacctaacacgacgcgctgggtcaggttaccca

NXJH01000131.1 catccatctccagcactttacagtcctcacctaacacgacgcgctgggtcaggttaccca

NXKO01000060.1 catccatctccagcactttacagtcctcacctaacacgacgcgctgggtcaggttaccca

\*\*\*\*\*

NXJN01000053.1 ggtcatcaaagttcaatacAAAAAGCGACCGGTAAGGGATGTCAGCAGTTCAAAGTAT

NXJH01000131.1 ggtcatcaaagttcaatacAAAAAGCGACCGGTAAGGGATGTCAGCAGTTCAAAGTAT

NXKO01000060.1 ggtcatcaaagttcaatacAAAAAGCGACCGGTAAGGGATGTCAGCAGTTCAAAGTAT

\*\*\*\*\*

NXJN01000053.1 gcgggtggc gatgaggcgcaacataagttccggttccatagcaatagccagacgctgca

NXJH01000131.1 gcgggtggc gatgaggcgcaacataagttccggttccatagcaatagccagacgctgca

NXKO01000060.1 gcgggtggc gatgaggcgcaacataagttccggttccatagcaatagccagacgctgca

\*\*\*\*\*

NXJN01000053.1 ccgggtcgctcaattcagggtggaaattatgatgggcacgtaagcgggggaatttgcgg

NXJH01000131.1 ccgggtcgctcaattcagggtggaaattatgatgggcacgtaagcgggggaatttgcgg

NXK001000060.1 ccggtcgctcaattcagggtggaattatgatgggcacgtaagcgggggaattg

\*\*\*\*\*

NXJN01000053.1 cttgtcgctttgcttgcgtaggtcgttgaagtaagttgttcatattataagccttat

NXJH01000131.1 cttgtcgctttgcttgcgtaggtcgttgaagtaagttgttcatattataagccttat

NXK001000060.1 cttgtcgctttgcttgcgtaggtcgttgaagtaagttgttcatattataagccttat

\*\*\*\*\*

NXJN01000053.1 tgcattctgcagcttacggcaaccagggtgccgtaaggctttttgtataactaacaatc

NXJH01000131.1 tgcattctgcagcttacggcaaccagggtgccgtaaggctttttgtataactaacaatc

NXK001000060.1 tgcattctgcagcttacggcaaccagggtgccgtaaggctttttgtataactaacaatc

\*\*\*\*\*

NXJN01000053.1 gattagccacggcattcgcggaacaaatcgcggtcaggattatagacgctggtgcttacg

NXJH01000131.1 gattagccacggcattcgcggaacaaatcgcggtcaggattatagacgctggtgcttacg

NXK001000060.1 gattagccacggcattcgcggaacaaatcgcggtcaggattatagacgctggtgcttacg

\*\*\*\*\*

NXJN01000053.1 tcccacagccccaaaatc gatgagaacaggtgtcgtgggaatatgatttttcgccgca

NXJH01000131.1 tcccacagccccaaaatc gatgagaacaggtgtcgtgggaatatgatttttcgccgca

NXK001000060.1 tcccacagccccaaaatc gatgagaacaggtgtcgtgggaatatgatttttcgccgca

\*\*\*\*\*

NXJN01000053.1 ttattttcaaggcaagacatgttgatgtgttccggcgataaagcccggtgacatccag

NXJH01000131.1 ttattttcaaggcaagacatgttgatgtgttccggcgataaagcccggtgacatccag

NXK001000060.1 ttattttcaaggcaagacatgttgatgtgttccggcgataaagcccggtgacatccag

\*\*\*\*\*

NXJN01000053.1 acctgcatcggaatatgctgctgctgatccgggtccagttgtacggcgtgccgtgcaga

NXJH01000131.1 acctgcatcggaatatgctgctgctgatccgggtccagttgtacggcgtgccgtgcaga

NXK001000060.1 acctgcatcggaatatgctgctgctgatccgggtccagttgtacggcgtgccgtgcaga

\*\*\*\*\*

NXJN01000053.1 tatagcccgtttcgccaatgattcaccatgatcggacacataaagcagcacggtgttg  
NXJH01000131.1 tatagcccgtttcgccaatgattcaccatgatcggacacataaagcagcacggtgttg  
NXKO01000060.1 tatagcccgtttcgccaatgattcaccatgatcggacacataaagcagcacggtgttg

\*\*\*\*\*

NXJN01000053.1 tactgatcgtgtaatTTTTtagctttcaatcatctcagctaatacatagtctgtataa  
NXJH01000131.1 tactgatcgtgtaatTTTTtagctttcaatcatctcagctaatacatagtctgtataa  
NXKO01000060.1 tactgatcgtgtaatTTTTtagctttcaatcatctcagctaatacatagtctgtataa

\*\*\*\*\*

NXJN01000053.1 cgaagggtgtgtcgtaggtgtgaccaattgttcctgagtacagtttcgatatcgcta  
NXJH01000131.1 cgaagggtgtgtcgtaggtgtgaccaattgttcctgagtacagtttcgatatcgcta  
NXKO01000060.1 cgaagggtgtgtcgtaggtgtgaccaattgttcctgagtacagtttcgatatcgcta

\*\*\*\*\*

NXJN01000053.1 cgtgcacattcgggatgaagtggcgtgctcagccggataacgcaggaataaagtcggt  
NXJH01000131.1 cgtgcacattcgggatgaagtggcgtgctcagccggataacgcaggaataaagtcggt  
NXKO01000060.1 cgtgcacattcgggatgaagtggcgtgctcagccggataacgcaggaataaagtcggt

\*\*\*\*\*

NXJN01000053.1 ccatggctccaatgatatggaaggcgacaagcttatcacctggcattttggcgatttca  
NXJH01000131.1 ccatggctccaatgatatggaaggcgacaagcttatcacctggcattttggcgatttca  
NXKO01000060.1 ccatggctccaatgatatggaaggcgacaagcttatcacctggcattttggcgatttca

\*\*\*\*\*

NXJN01000053.1 tcatcaaggtttccagcatcacctcgtcatggcacgttttgccatcgacagtttcggg  
NXJH01000131.1 tcatcaaggtttccagcatcacctcgtcatggcacgttttgccatcgacagtttcggg  
NXKO01000060.1 tcatcaaggtttccagcatcacctcgtcatggcacgttttgccatcgacagtttcggg

\*\*\*\*\*



NXJN0100053.1 ttatcactaggcttaatttcgacagtcgggatgcggtacatacgcctttacaaccgcca  
NXJH01000131.1 ttatcactaggcttaatttcgacagtcgggatgcggtacatacgcctttacaaccgcca  
NXKO0100060.1 ttatcactaggcttaatttcgacagtcgggatgcggtacatacgcctttacaaccgcca

\*\*\*\*\*

NXJN0100053.1 tcgttctctttccataacagcgagacaccggtttctgcacgatgtcgaggaaatttca  
NXJH01000131.1 tcgttctctttccataacagcgagacaccggtttctgcacgatgtcgaggaaatttca  
NXKO0100060.1 tcgttctctttccataacagcgagacaccggtttctgcacgatgtcgaggaaatttca

\*\*\*\*\*

NXJN0100053.1 ctgtagatgctttttactgtctactcgggtcgattcatattcgagaacatgcacgga  
NXJH01000131.1 ctgtagatgctttttactgtctactcgggtcgattcatattcgagaacatgcacgga  
NXKO0100060.1 ctgtagatgctttttactgtctactcgggtcgattcatattcgagaacatgcacgga

\*\*\*\*\*

NXJN0100053.1 acggatattgcggtagcggtagcaggaatgcatattttaaacgaaataacgccgccc  
NXJH01000131.1 acggatattgcggtagcggtagcaggaatgcatattttaaacgaaataacgccgccc  
NXKO0100060.1 acggatattgcggtagcggtagcaggaatgcatattttaaacgaaataacgccgccc

\*\*\*\*\*

NXJN0100053.1 gatttgctggtaaaggcattggtatcacgcaataaccgttcatcgagaaattctggctg  
NXJH01000131.1 gatttgctggtaaaggcattggtatcacgcaataaccgttcatcgagaaattctggctg  
NXKO0100060.1 gatttgctggtaaaggcattggtatcacgcaataaccgttcatcgagaaattctggctg

\*\*\*\*\*

NXJN0100053.1 cgtgccgtttcgccaatcaccaggaacatcagcgtgggttttctgtgagcgacgacgcgt  
NXJH01000131.1 cgtgccgtttcgccaatcaccaggaacatcagcgtgggttttctgtgagcgacgacgcgt  
NXKO0100060.1 cgtgccgtttcgccaatcaccaggaacatcagcgtgggttttctgtgagcgacgacgcgt

\*\*\*\*\*

NXJN0100053.1 ttagcatcattccccagcgtctggaaaggcactttagtcgtaaagtagtatccttaaca  
NXJH01000131.1 ttagcatcattccccagcgtctggaaaggcactttagtcgtaaagtagtatccttaaca  
NXKOO1000060.1 ttagcatcattccccagcgtctggaaaggcactttagtcgtaaagtagtatccttaaca

\*\*\*\*\*

NXJN0100053.1 tactggaaagtgtgtaagcgtagttcgccgggatgatctctttattcaatgtcgagtta  
NXJH01000131.1 tactggaaagtgtgtaagcgtagttcgccgggatgatctctttattcaatgtcgagtta  
NXKOO1000060.1 tactggaaagtgtgtaagcgtagttcgccgggatgatctctttattcaatgtcgagtta

\*\*\*\*\*

NXJN0100053.1 ttgcgccgacagaggcataatcctgataataaagtcggcaacacctgcaatcaaactc  
NXJH01000131.1 ttgcgccgacagaggcataatcctgataataaagtcggcaacacctgcaatcaaactc  
NXKOO1000060.1 ttgcgccgacagaggcataatcctgataataaagtcggcaacacctgcaatcaaactc

\*\*\*\*\*

NXJN0100053.1 aacgatgccagcacggagagcaaacgtaagcaatgcctttataccattttcaggatat  
NXJH01000131.1 aacgatgccagcacggagagcaaacgtaagcaatgcctttataccattttcaggatat  
NXKOO1000060.1 aacgatgccagcacggagagcaaacgtaagcaatgcctttataccattttcaggatat

\*\*\*\*\*

NXJN0100053.1 tgaattttattgaaaaaggaggatggcaggaaggataccggtaaagacgaaccatata  
NXJH01000131.1 tgaattttattgaaaaaggaggatggcaggaaggataccggtaaagacgaaccatata  
NXKOO1000060.1 tgaattttattgaaaaaggaggatggcaggaaggataccggtaaagacgaaccatata

\*\*\*\*\*

NXJN0100053.1 ataattgagccattaagataggaatgcgcttctgggggtagtttcaataatgttttga  
NXJH01000131.1 ataattgagccattaagataggaatgcgcttctgggggtagtttcaataatgttttga  
NXKOO1000060.1 ataattgagccattaagataggaatgcgcttctgggggtagtttcaataatgttttga

\*\*\*\*\*

NXJN0100053.1 atcatcgtttgatcaaacattctttatatttagtgcgaataactgaccagtgagcca

NXJH01000131.1 atcatcgtttgatcaaacattactttatatttttagtgcgaataactgaccagtgagcca

NXKOO1000060.1 atcatcgtttgatcaaacattactttatatttttagtgcgaataactgaccagtgagcca

\*\*\*\*\*

NXJN01000053.1 gtgataaacagtaaagcaaagaaaggtttcagcagaaaacgaactgagaaaggcataaaa

NXJH01000131.1 gtgataaacagtaaagcaaagaaaggtttcagcagaaaacgaactgagaaaggcataaaa

NXKOO1000060.1 gtgataaacagtaaagcaaagaaaggtttcagcagaaaacgaactgagaaaggcataaaa

\*\*\*\*\*

NXJN01000053.1 acaacgttaagcgccgaaccagaacaaaggaatagaaatgacaaaaccaattttgaca

NXJH01000131.1 acaacgttaagcgccgaaccagaacaaaggaatagaaatgacaaaaccaattttgaca

NXKOO1000060.1 acaacgttaagcgccgaaccagaacaaaggaatagaaatgacaaaaccaattttgaca

\*\*\*\*\*

NXJN01000053.1 tgcctctaatgcgacaaaatctcgtaaaaatgcagcaatattggccagttaagtaaaaac

NXJH01000131.1 tgcctctaatgcgacaaaatctcgtaaaaatgcagcaatattggccagttaagtaaaaac

NXKOO1000060.1 tgcctctaatgcgacaaaatctcgtaaaaatgcagcaatattggccagttaagtaaaaac

\*\*\*\*\*

NXJN01000053.1 gcaaagatcattgccagaagtaaaaccagcggaataactttcacctgaaaagtacaggc

NXJH01000131.1 gcaaagatcattgccagaagtaaaaccagcggaataactttcacctgaaaagtacaggc

NXKOO1000060.1 gcaaagatcattgccagaagtaaaaccagcggaataactttcacctgaaaagtacaggc

\*\*\*\*\*

NXJN01000053.1 attaacacctcggaataatagtaaacagtaaaaacattgatgataattacaacaattca

NXJH01000131.1 attaacacctcggaataatagtaaacagtaaaaacattgatgataattacaacaattca

NXKOO1000060.1 attaacacctcggaataatagtaaacagtaaaaacattgatgataattacaacaattca

\*\*\*\*\*

NXJN01000053.1 atctaataattatgattgccttattcgctgcaaagcagagattatcattctgaaatcttag

NXJH01000131.1 atctaataattatgattgccttattcgctgcaaagcagagattatcattctgaaatcttag

NXK001000060.1 atctaataattatgattgccttattcgctgcaaagcagagattatcattctgaaatcttag

\*\*\*\*\*

NXJN01000053.1 gttaaccttaacgaggctttgtgaataaatcagatttcgggtaagtctccccgtagcg

NXJH01000131.1 gttaaccttaacgaggctttgtgaataaatcagatttcgggtaagtctccccgtagcg

NXK001000060.1 gttaaccttaacgaggctttgtgaataaatcagatttcgggtaagtctccccgtagcg

\*\*\*\*\*

NXJN01000053.1 ggttggttttcaggcaatacgcacgctttcaggcatacctgcttctgtcattttgtca

NXJH01000131.1 ggttggttttcaggcaatacgcacgctttcaggca-----

NXK001000060.1 ggttggttt-----

\*\*\*\*\*

NXJN01000053.1 gcgctgtaccaggccatag

NXJH01000131.1 -----

NXK001000060.1 -----