

Table SS1. SIRT1 Raw data and % activity data for compounds **28**, **32**, **38**

| Raw data | Compd No | 28 | 28 | 28 | 32 | 32 | 32 | 38 | 38 | 38 | | |
|-------------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|----------------|
| | Conc.(M) | PK128-C3 | PK128-C3 | PK128-C3 | PK110 | PK110 | PK110 | PK106-C3 | PK106-C3 | PK106-C3 | Suramin Conc.(M) | Suramin |
| | 1,00E-04 | 50492 | 50492 | 50492 | 38402 | 48190 | 55689 | 7242 | 786 | 12564 | 1,00E-04 | -19267 |
| | 3,33E-05 | 249529 | 249529 | 249529 | 439309 | 519459 | 407964 | 36959 | 25897 | 27290 | 3,33E-05 | 3376 |
| | 1,11E-05 | 537920 | 537920 | 537920 | 713922 | 863882 | 745605 | 147974 | 133162 | 156318 | 1,11E-05 | 60532 |
| | 3,70E-06 | 741797 | 741797 | 741797 | 813702 | 882250 | 801335 | 645551 | 590259 | 628721 | 3,70E-06 | 278997 |
| | 1,23E-06 | 770089 | 770089 | 770089 | 817695 | 877991 | 784777 | 827994 | 824337 | 800970 | 1,23E-06 | 511072 |
| | DMSO | 870466 | 870466 | 870466 | 862055 | 848969 | 848969 | 879381 | 879381 | 864894 | 4,12E-07 | 764878 |
| | | | | | | | | | | | 1,37E-07 | 785242 |
| | | | | | | | | | | | 4,57E-08 | 860515 |
| | | | | | | | | | | | 1,52E-08 | 871023 |
| | | | | | | | | | | | 5,08E-09 | 882441 |
| | | | | | | | | | | | DMSO | 892848 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| % Activity | | 28 | 28 | 28 | 32 | 32 | 32 | 38 | 38 | 38 | | |
| | Conc.(M) | PK128-C3 | PK128-C3 | PK128-C3 | PK110 | PK110 | PK110 | PK106-C3 | PK106-C3 | PK106-C3 | Suramin Conc.(M) | Suramin |
| | 1,00E-04 | 5,86 | 5,86 | 5,86 | 4,46 | 5,60 | 6,47 | 0,84 | 0,09 | 1,46 | 1,00E-04 | -2,24 |
| | 3,33E-05 | 28,98 | 28,98 | 28,98 | 51,02 | 60,32 | 47,38 | 4,29 | 3,01 | 3,17 | 3,33E-05 | 0,39 |
| | 1,11E-05 | 62,47 | 62,47 | 62,47 | 82,91 | 100,32 | 86,59 | 17,18 | 15,46 | 18,15 | 1,11E-05 | 7,03 |
| | 3,70E-06 | 86,14 | 86,14 | 86,14 | 94,50 | 102,46 | 93,06 | 74,97 | 68,55 | 73,01 | 3,70E-06 | 32,40 |
| | 1,23E-06 | 89,43 | 89,43 | 89,43 | 94,96 | 101,96 | 91,14 | 96,15 | 95,73 | 93,02 | 1,23E-06 | 59,35 |
| | DMSO | 101,09 | 101,09 | 101,09 | 100,11 | 98,59 | 98,59 | 102,12 | 102,12 | 100,44 | 4,12E-07 | 88,83 |
| | | | | | | | | | | | 1,37E-07 | 91,19 |
| | | | | | | | | | | | 4,57E-08 | 99,93 |
| | | | | | | | | | | | 1,52E-08 | 101,15 |
| | | | | | | | | | | | 5,08E-09 | 102,48 |

| | | | | | | | | | | | | |
|--|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|
| | | | | | | | | | | | DMSO | 103,69 |
| | HILLSLOPE | -1,327 | -1,327 | -1,327 | -2,088 | -3,059 | -2,264 | -2,319 | -2,165 | -2,218 | HILLSLOPE | -1,202 |
| | IC50 (M) | 1,70E-05 | 1,70E-05 | 1,70E-05 | 3,34E-05 | 3,79E-05 | 3,32E-05 | 5,78E-06 | 5,15E-06 | 5,82E-06 | IC50 (M) | 1,75E-06 |

Table SS2. SIRT1 Raw data and % activity data for compounds **39** and **40**

| Raw data | Compd No | 39 | 39 | 39 | 40 | 40 | 40 | | |
|-------------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------------|----------------|
| | Conc.(M) | PK108-C3 | PK108-C3 | PK108-C3 | PK100-C3 | PK100-C3 | PK100-C3 | Suramin Conc.(M) | Suramin |
| | 1,00E-04 | -13037 | -2055 | -13037 | 40936 | 50193 | 41840 | 1,00E-04 | -19267 |
| | 3,33E-05 | -6279 | 2939 | -6279 | 109032 | 130576 | 110767 | 3,33E-05 | 3376 |
| | 1,11E-05 | 21529 | 47803 | 21529 | 237308 | 295812 | 265086 | 1,11E-05 | 60532 |
| | 3,70E-06 | 171807 | 198488 | 171807 | 593450 | 715636 | 642585 | 3,70E-06 | 278997 |
| | 1,23E-06 | 517408 | 539019 | 517408 | 758071 | 858665 | 800692 | 1,23E-06 | 511072 |
| | DMSO | 879680 | 881180 | 879680 | 829267 | 865261 | 865261 | 4,12E-07 | 764878 |
| | | | | | | | | 1,37E-07 | 785242 |
| | | | | | | | | 4,57E-08 | 860515 |
| | | | | | | | | 1,52E-08 | 871023 |
| | | | | | | | | 5,08E-09 | 882441 |
| | | | | | | | | DMSO | 892848 |
| | | | | | | | | | |
| | | | | | | | | | |
| % Activity | Compd No | 39 | 39 | 39 | 40 | 40 | 40 | | |
| | Conc.(M) | PK108-C3 | PK108-C3 | PK108-C3 | PK100-C3 | PK100-C3 | PK100-C3 | Suramin Conc.(M) | Suramin |
| | 1,00E-04 | -0,80 | -1,51 | -0,24 | 4,75 | 5,83 | 4,86 | 1,00E-04 | -2,24 |
| | 3,33E-05 | 0,65 | -0,73 | 0,34 | 12,66 | 15,16 | 12,86 | 3,33E-05 | 0,39 |
| | 1,11E-05 | 4,83 | 2,50 | 5,55 | 27,56 | 34,35 | 30,78 | 1,11E-05 | 7,03 |
| | 3,70E-06 | 21,33 | 19,95 | 23,05 | 68,92 | 83,11 | 74,62 | 3,70E-06 | 32,40 |

| | | | | | | | | | |
|--|------------------|----------|----------|----------|----------|----------|----------|------------------|-----------------|
| | 1,23E-06 | 63,66 | 60,09 | 62,60 | 88,03 | 99,72 | 92,98 | 1,23E-06 | 59,35 |
| | DMSO | 102,16 | 102,16 | 102,33 | 96,30 | 100,48 | 100,48 | 4,12E-07 | 88,83 |
| | | | | | | | | 1,37E-07 | 91,19 |
| | | | | | | | | 4,57E-08 | 99,93 |
| | | | | | | | | 1,52E-08 | 101,15 |
| | | | | | | | | 5,08E-09 | 102,48 |
| | | | | | | | | DMSO | 103,69 |
| | | | | | | | | | |
| | HILLSLOPE | -1,654 | -1,665 | -1,536 | -1,402 | -1,608 | -1,453 | HILLSLOPE | -1,202 |
| | IC50 (M) | 1,67E-06 | 1,54E-06 | 1,66E-06 | 6,55E-06 | 8,16E-06 | 7,02E-06 | IC50 (M) | 1,75E-06 |

Figure SS1. IC₅₀ curve of compound 28

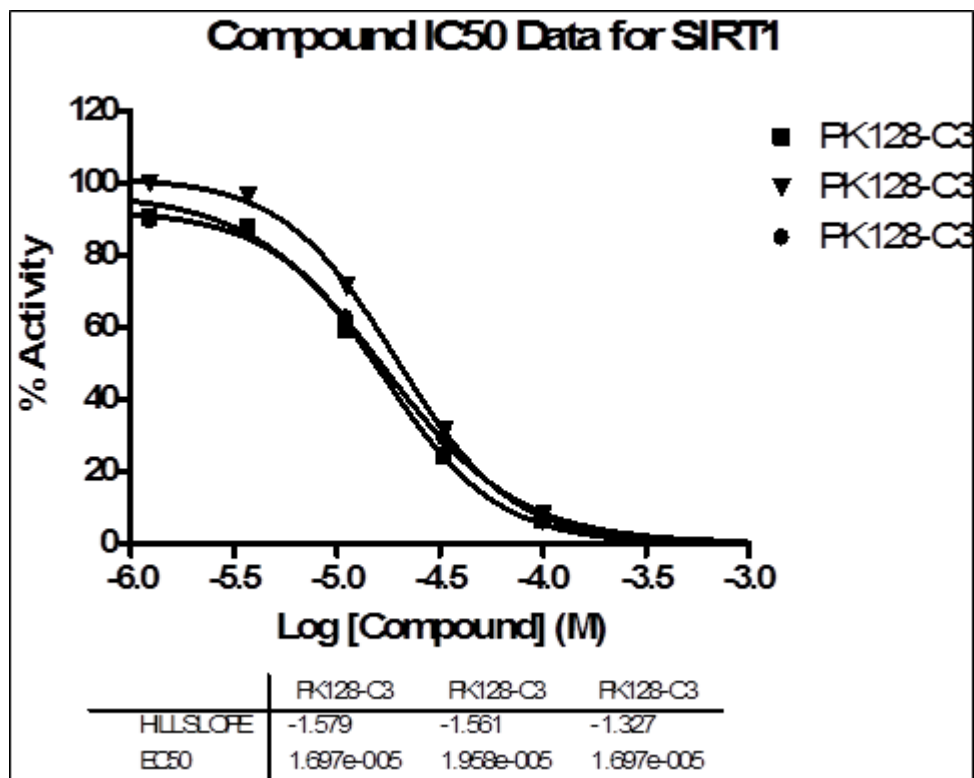


Figure SS2. IC₅₀ curve of compound 32

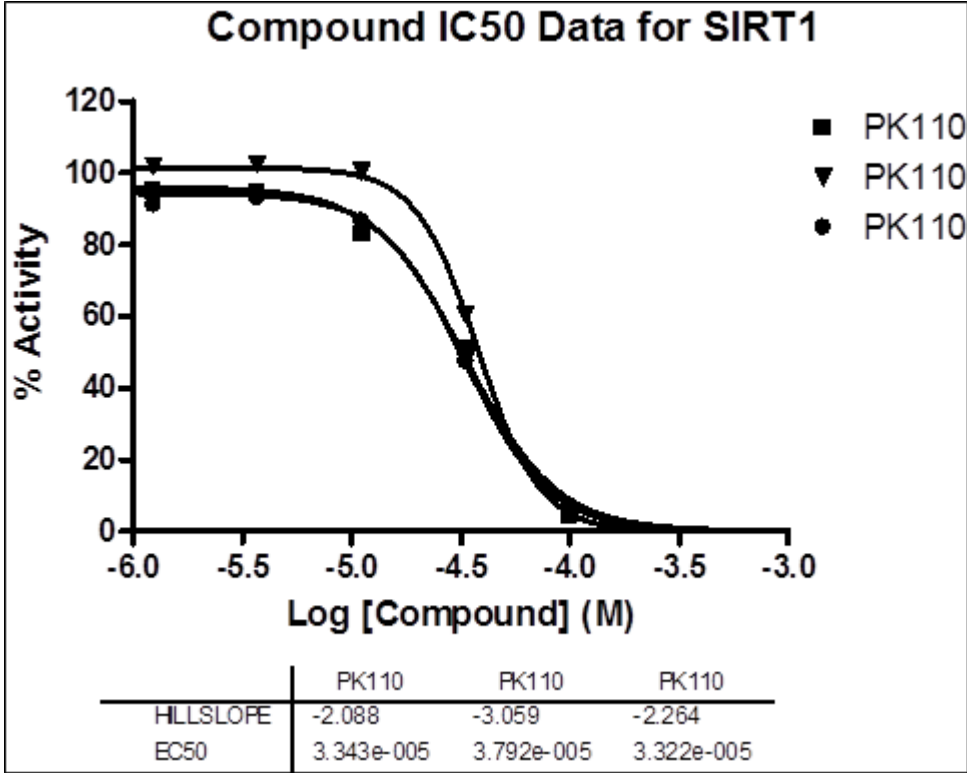


Figure SS3. IC₅₀ curve of compound 38

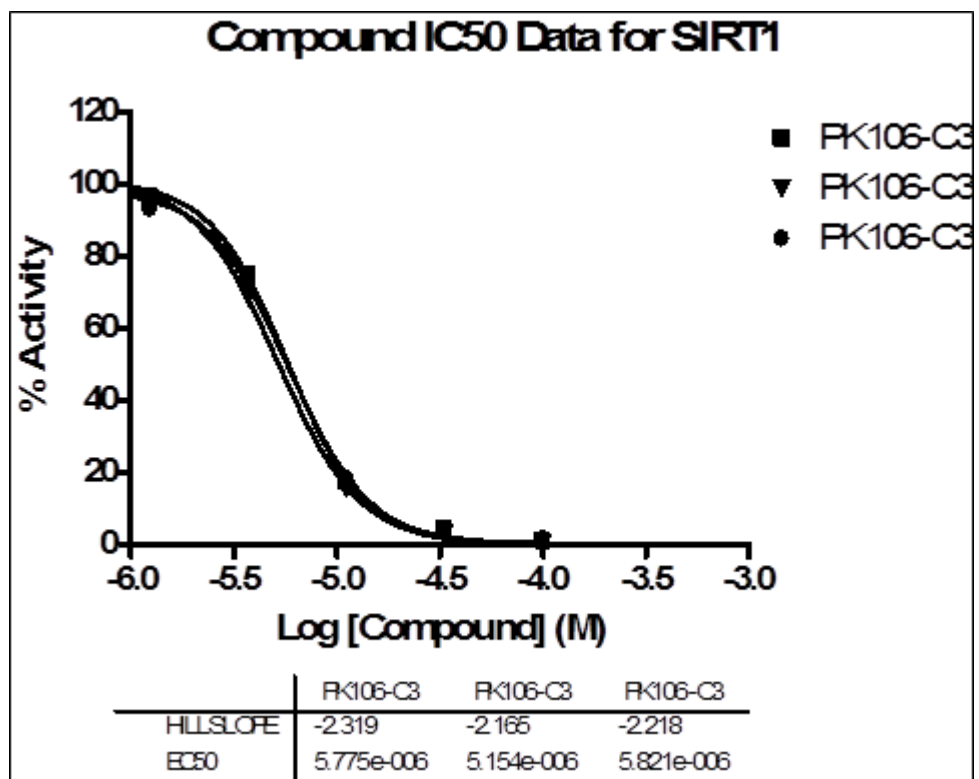


Figure SS4. IC₅₀ curve of compound 39

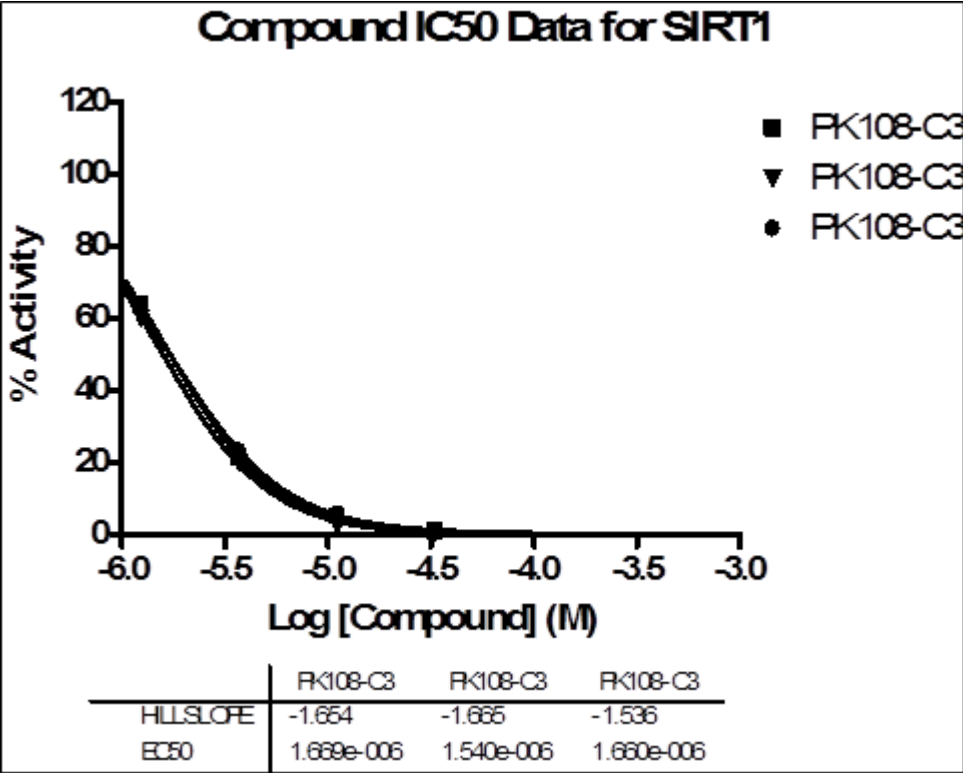


Figure SS5. IC₅₀ curve of compound 40

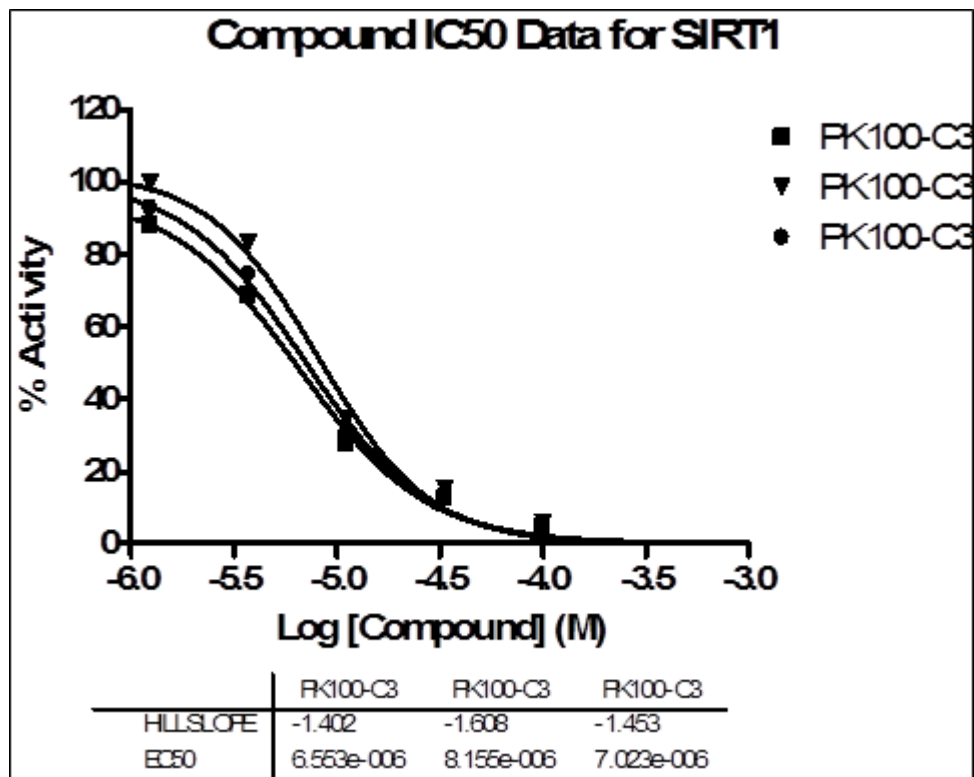


Figure SS6. IC₅₀ curve of compound suramin

