**Table S2. The relationships between SuperSeries and SubSeries used in this study**

|  |  |  |  |
| --- | --- | --- | --- |
| **SuperSeries** | **SubSeries** | **Platform(s)** | **Remaining?** |
| GSE18132 | GSE18130 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE18131 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE18611 | GPL5634 [Ce25b\_MR] Affymetrix C. elegans Tiling 1.0R Array | no |
| GSE40371 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE37305 | GSE37303 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE89624 | GSE89609 | GPL21572 [miRNA-4] Affymetrix Multispecies miRNA-4 Array [ProbeSet ID version] | no |
| GSE89614 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE94704 | GSE94701 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE94702 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE94703 | GPL19757 Illumina NextSeq 500 (Caenorhabditis elegans) | no |
| GSE77111 | GSE77109 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE77110 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE47778 | GSE51161 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE51162 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE43959 | GSE43953 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE43954 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE9967 | GSE9896 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE9897 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE54518 | GSE54513 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE54517 | GPL13657 Illumina HiSeq 2000 (Caenorhabditis elegans) | no |
| GSE46291 | GSE46288 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE46289 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE41058 | GSE41056 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE41057 | GPL13657 Illumina HiSeq 2000 (Caenorhabditis elegans) | no |
| GSE37433 | GSE28617 | GPL9269 Illumina Genome Analyzer II (Caenorhabditis elegans) | no |
| GSE37432 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE32944 | GSE32941 | GPL14724 Washington University/Genome Sequencing Center C. elegans 23K [oligoID version] | no |
| GSE32942 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE32943 | GPL14724 Washington University/Genome Sequencing Center C. elegans 23K [oligoID version] | no |
| GSE24923 | GSE23013 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE24845 | GPL1322 [Drosophila\_2] Affymetrix Drosophila Genome 2.0 Array | no |
| GSE24846 | GPL1319 [Zebrafish] Affymetrix Zebrafish Genome Array | no |
| GSE28853 | GSE28494 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE28852 | GPL7482 C. elegans 385K ChIP01-3 | no |
| GSE25834 | GSE25831 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE25833 | GPL8134 NimbleGen 071121\_Celegans180\_ChIP03\_design\_ID\_6737 | no |
| GSE25877 | GPL8134 NimbleGen 071121\_Celegans180\_ChIP03\_design\_ID\_6737 | no |
| GSE14640 | GSE14649 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE14650 | GPL8133 NimbleGen 2006-05-26\_CE\_WS158\_ChIP design\_ID 3801 | no |
| GSE14651 | GPL7098 NimbleGen C\_elegans\_WS170\_Tiling\_Iso\_HX1 tiling design | no |
| GSE14652 | GPL8134 NimbleGen 071121\_Celegans180\_ChIP03\_design\_ID\_6737 | no |
| GSE14653 | GPL8135 NimbleGen 080319\_C\_elegans\_ChIP\_03\_design\_ID-7348 | no |
| GSE14009 | GSE11055 | GPL200 [Celegans] Affymetrix C. elegans Genome Array | yes |
| GSE13973 | GPL9269 Illumina Genome Analyzer II (Caenorhabditis elegans) | no |

**Notes:** Up to the end of 2018, 171 GEO Series were published in GEO database, with microarray GPL200 platform. Of which, 18 superSeries were removed as shown in above table. GSE81854, GSE95603, GSE41486, GSE7354 and GSE14932 were removed because of small sample size (less than 3). In addition, GSE51502, GSE2862 and GSE1762 were also removed because their raw data were not supplied. Additionally, though several samples were included in GSE6547 and GSE9246, GSE15016 and GSE14932 simultaneously, the first three datasets were remained because of few repeated samples among these four datasets.