**Extended Data Table 2.** Strains used in this work.

|  |  |  |
| --- | --- | --- |
| ***C. elegans* strain** | **Genotype** | **Source and/or**  **parent strainsa,b** |
|  |  |  |
| N2 | N2 (Bristol) WT | CGC |
| RB993 | *tdc-1(ok914)* II | CGC |
| RB1161 | *tbh-1(ok1196)* X | CGC |
| MT15620 | *cat-2(n4547)* II | CGC |
| MT15434 | *tph-1(mg280)* II | CGC |
| PY9349 | *tdc-1(ok914)* II; *tbh-1(ok1196)* X | RB993 and RB1161 |
| PY9350 | *tyra-2(tm1815)* X  (backcrossed 2X) | NBRP |
|  |  |  |
| CX12800 | *ser-3(ad1774)* I | CGC |
| CX13079 | *octr-1(ok371)*  X | CGC |
| PY9351 | *octr-1(ok371)*  X; *oyEx630*[*sra-6*p*::octr-1*, *unc-122*p*::mcherry*] line 1 | pMOD100 injected into CX13079 |
| PY9352 | *octr-1(ok371)*  X; *oyEx631*[*sra-6*p*::octr-1*, *unc-122*p*::mcherry*] line 2 | pMOD100 injected into CX13079 |
| GR1333 | *yzIs71*[*tph-1*p*::gfp, rol-6(su10060*] | CGC |
|  |  |  |
| **Bacterial Strain** | **Species/Genotype** | **Source and/or**  **parent strains** |
|  |  |  |
| OP50 | *E. coli /* WT | Laboratory strain, CGC |
| JUb39 | *Providencia alcalifaciens* / WT | *C. elegans* in rotting apple (isolated by Marie-Anne Félix)1,2 |
| DA1877 | *Comomonas sp.* / WT | Soil (isolated by Boris Shtonda)3 |
| DA1878 | *Pseudomonas sp.* / WT | Soil (isolated by Boris Shtonda)3 |
| DA1880 | *Bacillus megaterium* / WT | Soil (isolated by Boris Shtonda)3 |
| PYb007 | *Providencia rettgeri* / WT | Nematodes isolated from residential compost |
| PA103 | *Pseudomonas aeruginosa* | Laboratory strain, gift from Yun Zhang4 |
| PAK | *P. aeruginosa* | Laboratory strain, gift from Yun Zhang4 |
| PYb110 | *P. alcalifaciens ΔtyrDC*::cmR | Homologous recombination in JUb39 |
| PYb111 | *P. alcalifaciens ΔadcA* | Homologous recombination in JUb39 |
| PYb112 | *P. alcalifaciens ΔtyrDC*::cmR *ΔadcA* | Homologous recombination in PYb110 |

aCGC – *Caenorhabditis* Genetics Center; bNBRP – National BioResource Project

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