

## SUPPLEMENTARY TABLE

**Supplementary Table 1. *C. elegans* strains used in this study.**

| Strain name | Genotype  | Source  |
|-------------|---|---|
| N2          | Wild-type   | Lab stock   |
| ATU3301     | <i>ccIs4251(Pmyo-3::GFP::LacZ::NLS + Pmyo-3::Mito-GFP + dpy-20(+)) I; aceIs1(Pmyo-3::Mito-LAR-GECO + Pmyo-2::RFP)</i> | CGC   |
| CB408       | <i>unc-43(e408) IV</i>  | CGC   |
| CB1370      | <i>daf-2(e1370) III</i>   | CGC   |
| CF1038      | <i>daf-16(mu86) I</i>   | CGC   |
| CF1553      | <i>muIs84(Psod-3::GFP + rol-6(su1006))</i>  | CGC   |
| CU5991      | <i>fzo-1(tm1133) II</i>   | CGC   |
| LIU1        | <i>ldrIs1(Pdhs-3::dhs-3::GFP + unc-76(+))</i>   | CGC   |
| NK3229      | <i>unc-119(ed4) III; qyIs629(eef-1A.1p::PercevalHR::unc-54 UTR + unc-119(+))</i>                                      | CGC   |
| PD4251      | <i>ccIs4251(Pmyo-3::GFP::LacZ::NLS + Pmyo-3::Mito-GFP + dpy-20(+)) I</i>  | CGC   |
| SJ4005      | <i>zcIs4(Phsp-4::GFP) V</i>   | CGC   |
| SJ4058      | <i>zcIs9(Phsp-60::GFP + lin-15(+)) V</i>  | CGC   |
| SJ4100      | <i>zcIs13(Phsp-6::GFP + lin-15(+)) V</i>  | CGC   |
| TJ356       | <i>zIs356(Pdaf-16::daf-16a/b::GFP + rol-6(su1006))<br/>prx-11(CSR1) I</i>   | CGC<br>Huanhu Zhu Lab; Li et al.,<br><i>Cell Reports</i> 2022 |
| KAB34       | <i>louIs2(Pges-1::mCherry-GFP-SKL::unc-54 UTR) IV</i>   | Dolese et al., <i>Autophagy</i> 2022                          |
| KAB111      | <i>louIs7(Pges1::sqst-1-mCherry-GFP::unc-54 UTR)</i>  | Villalobos et al., <i>Nature Aging</i> 2023                   |
| KAB296      | <i>ccIs4251(Pmyo-3::GFP::LacZ::NLS + Pmyo-3::Mito-GFP + dpy-20(+)) I; fzo-1(tm1133) II</i>                            | This study  |
| KAB323      | <i>prx-11(CSR1) I; louIs2(Pges-1::mCherry-GFP-SKL::unc-54 UTR) IV</i>   | This study  |
| KAB408      | <i>ccIs4251(Pmyo-3::GFP::LacZ::NLS + Pmyo-3::Mito-GFP + dpy-20(+)) prx-11(CSR1) I</i>                                 | This study  |
| KAB452      | <i>ccIs4251(Pmyo-3::GFP::LacZ::NLS + Pmyo-3::Mito-GFP + dpy-20(+)) I; unc-43(e408) IV</i>                             | This study  |
| KAB476      | <i>ccIs4251(Pmyo-3::GFP::LacZ::NLS + Pmyo-3::Mito-GFP + dpy-20(+)) daf-16(mu86) I</i>                                 | This study  |
| KAB578      | <i>fzo-1(tm1133) II; louIs2(Pges-1::mCherry-GFP-SKL::unc-54 UTR) IV</i>   | This study  |
| KAB579      | <i>daf-16(mu86) I; louIs2(Pges-1::mCherry-GFP-SKL::unc-54 UTR) IV</i>   | This study  |
| KAB588      | <i>unc-43(e408) louIs2(Pges-1::mCherry-GFP-SKL::unc-54 UTR) IV</i>  | This study  |