**Supplementary File 1. List of strains**

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| **Strain** | **Genotype** | **Reference(s)** |
| **Oogenesis marker, *lin-41::GFP*** | *lin-41(tn1541[GFP::tev::s::lin-41])* | Spike et al., 2014 |
| **Oogenesis marker, *oma-1::GFP*** | *unc-119(ed3); teIs1(oma-1::GFP + unc-119[+])* | Lin, 2003 |
| **Sensory mutants** | *odr-1(n1936)* | L'Etoile and Bargmann, 2000 |
| *odr-3(n1605)* | Roayaie et al., 1998 |
| *odr-10(ky225)* | Sengupta et al., 1996 |
| *osm-3(p802)* | Tabish et al., 1995 |
| *lin-41(tn1541); osm-3(p802)* | This work |
| **ADF (-)** | *udEx211(srh-142::ced-3(p15); srh-142::ced-3(p17;*  *srh-142::gfp; elt-2::gfp)* | Krzyzanowski et al., 2016 |
| **ASH (-)** | *peIs1713(sra-6p::mCasp-1 + unc-122p::mCherry)* | Yoshida et al., 2012 |
| **ASI (-)** | *oyIs84(gpa-4p::TU813 gcy-27p::TU814 gcy-*  *27p::GFP coelp::dsRED)* | Beverly et al., 2011 |
| *lin-41(tn1541); oyIs84* | This work |
| **ASJ (-)** | *pgIs(trx-1p::ICE)* | Cornils et al., 2011; integrated by M.  Goodman (gift) |
| *lin-41(tn1541); pgIs(trx-1p::ICE)* | This work |
| *teIs1(oma-1::GFP + unc-119[+]); pgIs(trx-1p::ICE)* | This work |
| **ASK (-)** | *qrls2(sra-9::mCasp1)* | Srinivasan et al., 2012 |
| **AWA (-)** | *odr-7(ky4)* | Sengupta et al., 1994 |
| *lin-41(tn1541); odr-7(ky4)* | This work |
| *Ex[odr-10::mCasp1 + myo-3::GFP]* | Yoshida et al., 2012; Schiffer et al.,  2020 |
| **AWB (-)** | *peIs1715(str-1p::mCasp-1 + unc-122p::GFP)* | Yoshida et al., 2012 |
| **AWC (-)** | *oyIs85(ceh-36p::TU#813 + ceh-36p::TU#814 + srtx-*  *1p::GFP + unc-122p::DsRed)* | Beverly et al., 2011 |
| **ASJ (-); AWA(-)** | *pgIs(trx-1p::ICE); odr-7(ky4)* | This work |
| *lin-41(tn1541); pgIs(trx-1p::ICE); odr-7(ky4)* | This work |
| **Insulin signaling mutants** | *daf-2(e1368)* | Gems et al., 1998 |
| *lin-41(tn1541); daf-2(e1368)* | This work |
| *daf-2(e1370)* | Gems et al., 1998 |
| *lin-41(tn1541); daf-2(e1370)* | This work |
| *daf-16(mu86)* | Lin et al., 1997 |
| *lin-41(tn1541) daf-16(mu86)* | This work |
| *ins-1(nr2091)* | Pierce et al., 2001 |
| *lin-41(tn1541); ins-1(nr2091)* | This work |
| *ins-6(tm2416)* | Cornils et al., 2011 |
| *lin-41(tn1541); ins-6(tm2416)* | This work |
| *lin-41(tn1541) daf-16(mu86); ins-6(tm2416)* | This work |
| *ins-6(tm2416); teIs1(oma-1::GFP + unc-119[+])* | This work |
| *daf-28(tm2308)* | Cornils et al., 2011 |
| *lin-41(tn1541); daf-28(tm2308)* | This work |
| *ins-6(tm2416); daf-28(tm2308)* | Cornils et al., 2011 |
| *ins-6(tm2416); ins-1(nr2091)* | Cornils et al., 2011 |
| *ins-1(nr2091); daf-28(tm2308)* | Cornils et al., 2011 |
| *ins-6(tm2416); ins-1(nr2091); daf-28(tm2308)* | Cornils et al., 2011 |
| ***ins-6* full genomic rescue** | *lin-41(tn1541); ins-6(tm2416); jxEx27(ins-6p::ins-6 [2*  *ng/ul]; ofm-1::GFP [25 ng/ul])* | Cornils et al., 2011; this work |
| *lin-41(tn1541); ins-6(tm2416); jxEx28(ins-6p::ins-6 [2*  *ng/ul]; ofm-1::GFP [25 ng/ul])* | Cornils et al., 2011; this work |

**Supplementary File 1. List of strains (continued)**

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| **Strain** | **Genotype** | **Reference(s)** |
| ***ins-6* ASI-specific rescue** | *lin-41(tn1541); ins-6(tm2416); jxEx51(str-3p::ins-6*  *[25 ng/ul]; ofm-1::GFP [25 ng/ul])* | Cornils et al., 2011; this work |
| ***ins-6* ASJ-specific rescue** | *lin-41(tn1541); ins-6(tm2416); jxEx58(trx-1p::ins-6*  *[25 ng/ul]; ofm-1::GFP [25 ng/ul])* | Cornils et al., 2011; this work |
| *lin-41(tn1541); ins-6(tm2416); jxEx59(trx-1p::ins-6*  *[25 ng/ul]; ofm-1::GFP [25 ng/ul])* | Cornils et al., 2011; this work |
| ***ins-6p::mCherry drcSi68*** | *ttTi5605 drcSi68(ins-6p::mCherry; Cb-unc-119[+])II* | This work |
| **floxed *ins-6* locus** | *lin-41(tn1541); ins-6(syb7547)* | This work |
| **ASJ-specific *nCRE*** | *lin-41(tn1541); ins-6(tm2416); jxEx225(trx- 1p::nCRE::unc-54 3’UTR [50 ng/ul] + unc-122p::GFP*  *[25 ng/ul])* | This work |

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