

Table S2 GENESDEV/2017/309625\_Zhang

Identifier	Strains
TQ3030	N2(Wild-Type)
TQ1516	<i>trpa-1(ok999)</i>
TQ1648	<i>xuEx606[Prgef-1::trpa-1::sl2::yfp]</i>
TQ4411	<i>xuEx1372[Posm-6::trpa-1::sl2::yfp]</i>
TQ4730	<i>xuEx1382[Pglr-1::trpa-1::sl2::mcherry]</i>
TQ4724	<i>xuEx1362[Pacr-2::trpa-1::sl2::yfp]</i>
TQ4406	<i>xuEx1366[Punc-25::trpa-1::sl2::yfp]</i>
TQ5521	<i>xuEx1670[Paqp-6::trpa-1::sl2::yfp]</i>
TQ6781	<i>xuEx2462[Paqp-6::trpa-1::sl2::cfp]</i>
TQ5670	<i>xuEx1911[Paakg1::sl2::mcherry + Paakg1::GCaMP6(f)]</i>
TQ6558	<i>xuEx2367[Paqp-6::syntaxin(T254I)::sl2::yfp]</i>
TQ6194	<i>xuEx2139[Prgef-1::flpase+Paakg1::frt2::TeTx+Paakg1::frt2::mcherry]</i>
TQ4077	<i>daf-16(mgDf47)</i>
TQ5695	<i>daf-16(mgDf47); xuEx1670</i>
TQ6481	<i>daf-16(mgDf47); xuEx2302[Pges-1::daf-16::sl2::mcherry]</i>
TQ6602	<i>daf-16(mgDf47); xuEx1670; xuEx2302</i>
TQ6782	<i>daf-16(mgDf47); xuEx2463[Prgef-1::daf-16::sl2::mcherry]</i>
TQ6784	<i>daf-16(mgDf47); xuEx1670; xuEx2463</i>
TQ2178	<i>unc-13(e51)</i>
TQ6899	<i>unc-13(e51); xuEx1670</i>
TQ1280	<i>unc-31(e169)</i>
TQ6892	<i>unc-31(e169); xuEx1670</i>
TQC1761	<i>xuEx165c[Paqp-6::unc-13 RNAi(S+AS)::sl2::mcherry]</i>
TQC1762	<i>xuEx1670; xuEx165c</i>
TQC1765	<i>xuEx163c[Paqp-6::unc-31 RNAi(S+AS)::sl2::mcherry]</i>
TQC1766	<i>xuEx1670; xuEx163c</i>
TQ5694	<i>eat-4(ky5)</i>
TQ5693	<i>eat-4(ky5); xuEx1670</i>
TQ6428	<i>xuEx2269[Paqp-6::eat-4 RNAi(S+AS)::sl2::mcherry]</i>
TQ576	<i>mgl-1(tm1811)</i>
TQ6181	<i>mgl-1(tm1811); xuEx1670</i>
TQ3698	<i>unc-25(e156)</i>
TQ6195	<i>unc-25(e156); xuEx1670</i>
TQ4935	<i>cat-2(e1112)</i>
TQ6186	<i>cat-2(e1112); xuEx1670</i>
TQ4927	<i>tbh-1(n3247)</i>
TQ6187	<i>tbh-1(n3247); xuEx1670</i>

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TQ4929	<i>tdc-1(n3419)</i>
TQ6188	<i>tdc-1(n3419); xuEx1670</i>
TQ6451	<i>unc-17(e245)</i>
TQ6829	<i>unc-17(e245); xuEx1670.</i>
TQ4931	<i>tph-1(mg280)</i>
TQ6185	<i>tph-1(mg280); xuEx1670</i>
TQ6555	<i>mgl-1(tm1811); xuEx1670; xuEx2364[Ptph-1(L)::mgl-1b::sl2::mcherry2]</i>
TQ6503	<i>mgl-1(tm1811); xuEx1670; xuEx2331[Ptph-1(s)::mgl-1b::sl2::mcherry]</i>
TQ6580	<i>mgl-1(tm1811); xuEx1670; xuEx2378[Ptph-1(bc)::mgl-1b::sl2::mcherry]</i>
TQC1397	<i>xuEx31c[Ptph-1(s)::TeTx::sl2::mcherry]</i>
TQC1430	<i>xuEx31c; xuEx1670</i>
TQ6466	<i>xuEx2295[Ptph-1(s)::syntaxin(T254I)::sl2::mcherry]</i>
TQ6770	<i>daf-16(mgDf47); xuEx2295</i>
TQ6767	<i>daf-16(mgDf47); xuEx2331</i>
TQ616	<i>ser-7(tm1325)</i>
TQ6345	<i>ser-7(tm1325); xuEx1670</i>
TQ6765	<i>ser-7(tm1325); xuEx2331</i>
TQ6499	<i>ser-7(tm1325); xuEx1670; xuEx2330[Pges-1::ser-7a::sl2::mcherry]</i>
TQ6789	<i>xuEx2395[Pges-1::ser-7a::sl2::mcherry]</i>
TQ6026	<i>xuEx2047[Paqp-6::trpa-1::sl2::mcherry]</i>
TJ356	<i>zls356[daf-16::gfp + rol-6]</i>
TQ6027	<i>ls[SOD-3::gfp]; xuEx2047</i>
TQ6028	<i>zls356[daf-16::gfp + roller]; xuEx2047</i>
TQ6854	<i>xuEx2501 [Ptrx-1::GCaMP6(f)+Ptrx-1::sl2::DsRed]</i>
TQ6855	<i>tax-2(p671); xuEx2501</i>
TQ6856	<i>tax-2(p671); tax-4(p678); xuEx2501</i>
TQ6081	<i>xuEx2070[Ptrx-1::TeTx::sl2::yfp]</i>
TQ6650	<i>xuEx2415[Ptrx-1::tax-4 RNAi(S+AS)::sl2::yfp]</i>
TQ6590	<i>xuEx2387[Ptrx-1::tax-2 RNAi(S+AS)::sl2::yfp]</i>
TQ6462	<i>xuEx2291[Ptrx-1::syntaxin(T254I)::sl2::yfp]</i>
TQ6150	<i>daf-16(mgDf47); xuEx2070</i>
TQ6478	<i>daf-16(mgDf47); xuEx2070; xuEx2416[Pges-1::daf-16::sl2::mcherry]</i>
TQ6481	<i>daf-16(mgDf47); xuEx2070; xuEx2418[Prgef-1::daf-16::sl2::mcherry]</i>
TQ6141	<i>xuEx2083[Ptrx-1::unc-13RNAi(S+AS)::sl2::yfp]</i>
TQ6155	<i>xuEx2113[Ptrx-1::unc-31 RNAi(S+AS)::sl2::yfp]</i>
TQ6196	<i>xuEx2140[Ptrx-1::ins-6 RNAi(S+AS)::sl2::yfp]</i>
TQ6197	<i>xuEx2141[Ptrx-1::daf-28 RNAi(S+AS)::sl2::yfp]</i>
TQ6179	<i>xuEx2133[Ptrx-1::ins-6 RNAi(S+AS)::sl2::yfp + Ptrx-1::daf-28 RNAi(S+AS)::sl2::mcherry]</i>
TQ6836	<i>ins-6(tm2416); daf-28(tm2308)</i>
TQ6974	<i>ins-6(tm2416); daf-28(tm2308); xuEx2291</i>
TQ545	<i>daf-2(e1368)</i>
TQ6587	<i>daf-2(e1368); xuEx2070</i>
TQ6583	<i>daf-2(e1368); xuEx2291</i>

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TQ6459	<i>daf-2(e1368); xuEx2537[Pges-1::daf-2::sl2::mcherry]</i>
TQ6461	<i>daf-2(e1368); xuEx2538[Prgef-1::daf-2::sl2::mcherry]</i>
TQ6755	<i>daf-2(e1368); xuEx2537; xuEx2291</i>
TQ6758	<i>daf-2(e1368); xuEx2538; xuEx2291</i>
TQ7127	<i>ls[SOD-3::gfp]; xuEx2070</i>
TQ7123	<i>zls356[daf-16::gfp + rol-6]; xuEx2070</i>

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**Note:** All mutants have been outcrossed to N2 strain for four to eight times before performing lifespan assay.