

S1 Table. All strains used in this study

STRAIN	GENOTYPE
N2	Wild-Type
FK181	<i>ksIs2[Pdaf-7::GFP + rol-6(su1006)]</i>
ZD727	<i>ksIs2; crh-1(tz2)</i>
ZD899*	<i>ksIs2; cng-2(tm4267)</i>
ZD882	<i>ksIs2; cng-2(qd254)</i>
ZD887	<i>ksIs2; gpa-2(pk16) gpa-3(pk35)</i>
ZD1048	<i>ksIs2; cmk-1(oy21)</i>
ZD1401	<i>ksIs2; gcy-12(nj10)</i>
ZD1922	<i>ksIs2; egl-4(n478); him-5(e1490)</i>
ZD1737	<i>qdEx136[trx-1p::GCaMP5; ofm-1::gfp]</i>
ZD1949	<i>ksIs2; egl-4(ad450); him-5(e1490)</i>
ZD2020	<i>cng-2(tm4267); qdEx136[trx-1p::GCaMP5; ofm-1p::gfp]</i>
ZD2090	<i>ksIs2; gcy-12(ks100)</i>
ZD2091	<i>pde-5(nj49) ksIs2</i>
ZD2105	<i>pde-5(nj49) pde-1(nj57) ksIs2</i>
ZD2150	<i>pde-1(nj57) ksIs2</i>
ZD2151	<i>pde-5(nj49) pde-1(nj57) ksIs2; pde-3(nj59); pde-2(tm3098)</i>
ZD2170	<i>egl-4(n479); qdEx136[trx-1p::GCaMP5::unc-54 5'UTR; ofm-1p::gfp]</i>
ZD2534	<i>ksIs2; cng-2(qd386)</i>
ZD2535	<i>ksIs2; cng-2(qd387)</i>
ZD2250	<i>ksIs2; cng-2(qd254); qdEx[pJP3(trx-1p::cng-2cDNA::unc-54UTR) + ofm-1p::gfp] Line #1</i>
ZD2251	<i>ksIs2; cng-2(qd254); qdEx[pJP3(trx-1p::cng-2cDNA::unc-54UTR) + ofm-1p::gfp] Line #2</i>
ZD2275	<i>ksIs2; egl-4(n479ts)</i>
ZD2283	<i>ksIs2; egl-4(ad450) cng-2(qd254)</i>
ZD2307	<i>ksIs2; egl-4(n479); qdEx[trx-1p::mCherry::egl-4cDNA + ofm-1p::gfp] Line #1</i>
ZD2308	<i>ksIs2; egl-4(n479); qdEx[trx-1p::mCherry::egl-4cDNA + ofm-1p::gfp] Line #2</i>
ZD2526	<i>ksIs2; gcy-12(ks100); qdEx[trx-1p::gcy-12cDNA::unc-54UTR + ofm-1p::gfp] Line #1</i>
ZD2527	<i>ksIs2; gcy-12(ks100); qdEx[trx-1p::gcy-12cDNA::unc-54UTR + ofm-1p::gfp] Line #2</i>
ZD2536	<i>ksIs2; egl-4(n479); qdEx[pJP17(trx-1p::SV40-nls::mCherry::egl-4cDNA::unc54UTR) + ofm-1p::gfp] Line #1</i>
ZD2537	<i>ksIs2; egl-4(n479); qdEx[pJP17(trx-1p::SV40-nls::mCherry::egl-4cDNA::unc54UTR) + ofm-1p::gfp] Line #2</i>
ZD2538	<i>ksIs2; egl-4(n479); qdEx[pJP17(trx-1p::SV40-nls::mCherry::egl-4cDNA::unc54UTR) + ofm-1p::gfp] Line #3</i>
ZD2545	<i>ksIs2; crh-1(tz2); qdEx[pJP13(trx-1p::crh-1cDNA::unc-54UTR) + ofm-1p::gfp] Line #1</i>

ZD2546	<i>ksIs2; crh-1(tz2); qdEx[pJP13(trx-1p::crh-1cDNA::unc-54UTR) + ofm-1p::gfp]</i> Line #2
ZD2547	<i>ksIs2; crh-1(tz2); qdEx[pJP13(trx-1p::crh-1cDNA::unc-54UTR) + ofm-1p::gfp]</i> Line #3
ZD2598	<i>ksIs2; egl-4(n479); qdEx[trx-1p::mCherry::egl-4cDNA(T276A,T400A)::unc-54UTR) + ofm-1p::gfp]</i> Line #1
ZD2599	<i>ksIs2; egl-4(n479); qdEx[trx-1p::mCherry::egl-4cDNA(T276A,T400A)::unc-54UTR) + ofm-1p::gfp]</i> Line #2
ZD2600	<i>ksIs2; egl-4(n479); qdEx[trx-1p::mCherry::egl-4cDNA(T276A,T400A)::unc-54UTR) + ofm-1p::gfp]</i> Line #3

**tm4267* is currently classified as lethal or sterile by the National BioResource Project of Japan and was originally maintained on a balancer. However, *cng-2(tm4267)* is viable, as we were able to backcross away the linked lethal mutation.