

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

<b>Strain No.</b>	<b>Genotype</b>
N2	<i>wild type</i>
MG685	<i>mgSi43[cyk-4::gfp::pie-1 3'utr, cb-unc-119(+)] II; unc-119(ed3) III</i>
MG695	<i>mgSi44[cyk-4(<math>\Delta</math>C1)::gfp::pie-1 3'utr, cb-unc-119(+)] II; unc-119(ed3) III</i>
MG716	<i>mgSi16[cyk-4(r459a)::gfp::pie-1 3'utr, cb-unc-119(+)] II; unc-119(ed3) III</i>
MG733	<i>mgSi19[cyk-4(e448k)::gfp::pie-1 3'utr, cb-unc-119(+)] II; unc-119(ed3) III</i>
MG804	<i>mgSi33[cyk-4(k495e, r499e)::gfp::pie-1 3'utr, cb-unc-119(+)] II; unc-119(ed3) III</i>
MG822	<i>mgSi16[cyk-4(r459a)::gfp::pie-1 3'utr, cb-unc-119(+)] II; cyk-4(ok1034)/unc-64 III</i>
MG725	<i>mgSi43[cyk-4::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG726	<i>mgSi44[cyk-4(<math>\Delta</math>C1)::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG729	<i>mgSi16[cyk-4(r459a)::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG815	<i>mgSi33[cyk-4(k495e, r499e)::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG730	<i>nop-1(it142) III; mgSi43[cyk-4::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG737	<i>nop-1(it142) III; mgSi16[cyk-4(r459a)::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG816	<i>nop-1(it142) III; mgSi33[cyk-4(k495e, r499e)::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG717	<i>ced-10(n1993) IV; mgSi16[cyk-4(r459a)::gfp::pie-1 3'utr, cb-unc-119(+)] II; ltIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
MG764	<i>mgSi43[cyk-4::gfp::pie-1 3'utr, cb-unc-119(+)] II; zwIS151[nmy-2::rfp, cb-unc-119(+)]</i>
MG766	<i>mgSi44[cyk-4(<math>\Delta</math>C1)::gfp::pie-1 3'utr, cb-unc-119(+)] II; zwIS151[nmy-2::rfp, cb-unc-119(+)]</i>
MG765	<i>mgSi16[cyk-4(r459a)::gfp::pie-1 3'utr, cb-unc-119(+)] II; zwIS151[nmy-2::rfp, cb-unc-119(+)]</i>
MG817	<i>mgSi33[cyk-4(k495e, r499e)::gfp::pie-1 3'utr, cb-unc-119(+)] II; zwIS151[nmy-2::rfp, cb-unc-119(+)]</i>
EU1404	<i>cyk-4(or749ts) III</i>

Strain No.	Genotype
MG797	<i>ect-2(xs110) II; cyk-4(or749ts) III</i>
MG776	<i>ect-2(xs111) II; cyk-4(or749ts) III</i>
MG855	<i>ect-2(xs110 generated by CRISPR) II; cyk-4(or749ts) III</i>
MG863	<i>ect-2(xs110 generated by CRISPR) II</i>
MG887	<i>ect-2(xs111) II</i>
MG886	<i>cyk-4<sup>R459A</sup>/unc-64 III</i>
MG903	<i>ect-2(xs110) II; cyk-4<sup>R459A</sup> III</i>
MG904	<i>ect-2(xs111) II; cyk-4<sup>R459A</sup> III</i>
MG873	<i>unc-4(e120) ect-2(xs110) II; ItIs37[pAA64; pie-1p-mCHERRY::his-58, cb-unc-119 (+)] IV; ItIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] zuls45 [nmy-2::NMY-2::GFP, cb-unc-119(+)] V</i>
MG512	<i>cyk-4(or749ts) nop-1(it142) III</i>
OD239	<i>cyk-4(or749)ts ItIs38[pAA1; pie-1p-GFP::PH(PLC1delta1), cb-unc-119 (+)] III; ItIs37[pAA64; pie-1p-mCHERRY::his-58; unc-119 (+)] IV</i>
MG582	<i>cyk-4(or749)ts ItIs38[pAA1; pie-1p-GFP::PH(PLC1delta1), cb-unc-119 (+)] III; ced-10(n1993) ItIs37[pAA64; pie-1p-mCHERRY::his-58; unc-119 (+)] IV</i>
MG503	<i>nop-1(it142) ItIs38[pAA1; pie-1p-GFP::PH(PLC1delta1), cb-unc-119 (+)] III; ced-10(n1993) IV</i>
MG936	<i>nop-1(it142) III; ced-10(n1993) IV; mgSi16[cyk-4(R459A)::gfp rRNAi, cb- unc-119(+)] II; ItIs44[pAA173; pie-1p-mCherry::PH(PLC1delta1), cb-unc-119(+)] V</i>
NG103	<i>mig-2(gm103) X</i>