

**Table S1. Worm strains**

Name	Genotype	Origin
OC4	<i>zyg-1(it4)/ mIn1[mIs14 dpy-10(e128)] II</i>	This study
OC333	<i>zyg-1(it4) unc-4(e120) / mIn1[mIs14 dpy-10(e128)] II</i>	This study
OC317	<i>zyg-1(it4) unc-4(e120) / mIn1[mIs14 dpy-10(e128)] II; ltIs37 [pAA64: unc-119 (+) pie-1-mcherry-his-58]; ltIs25 [pAZ132: unc-119 (+) pie-1-gfp-tba-2]</i>	This study
OC294	<i>zyg-1(it4) unc-4(e120)/ mIn1[mIs14 dpy-10(e128)] II; him-8(e1489)IV</i>	This study
OC173	<i>zyg-1(it29) unc-4(e120)/ mIn1[mIs14 dpy-10(e128)] II</i>	This study
OC379	<i>zyg-1(it29)/ mIn1[mIs14 dpy-10(e128)] II</i>	This study
OC195	<i>zyg-1(it29) unc-4(e220)/ mIn1[mIs14 dpy-10(e128)] II; ojIs2 [pLM6:unc-119(+)] pie-1-gfp-tba-1]</i>	This study
OC287	<i>zyg-1(it29) unc-4(e120)/ mIn1[mIs14 dpy-10(e128)] II; him-8(e1489)IV</i>	This study
OC332	<i>zyg-1(it37) unc-4(e120)/ mIn1[mIs14 dpy-10(e128)] II</i>	This study
OC254	<i>zyg-1(it37) unc-4(e220)/ mIn1[mIs14 dpy-10(e128)] II; ojIs2 [pLM6:unc-119(+)] pie-1-gfp-tba-1]</i>	This study
OC263	<i>zyg-1(it37) unc-4)/ mIn1[mIs14 dpy-10(e128)] II; bsIs2 [pCK6.1: unc-119(+)] pie-1-gfp-spd-2]</i>	This study
OC284	<i>zyg-1(it37) unc-4(e120)/ mIn1[mIs14 dpy-10(e128)] II; him-8(e1489)IV</i>	This study
OD57	<i>unc-119(ed3) III; ltIs37 [pAA64: unc-119 (+) pie-1-mcherry-his-58]; ltIs25 [pAZ132: unc-119 (+) pie-1-gfp-tba-2]</i>	(McNally et al., 2006)
OC341	<i>unc-119(ed4) III; bsIs8[pMS5.1:unc-119(+)] pie-1-gfp-zyg-1C-terminus]</i>	This study
OC373	<i>unc-119(ed4) III; bsIs9[pMS8.1:unc-119(+)] pie-1-gfp-zyg-1kinase domain]</i>	This study
CB1489	<i>him-8(e1489) IV</i>	(Hodgkin et al., 1979)
JK574	<i>fog-2(q71) V</i>	(Schedl and Kimble, 1988)
OC297	<i>fog-2(q71) V; ltIs37 [pAA64: unc-119 (+) pie-1-mcherry-his-58]; ltIs25 [pAZ132: unc-119 (+) pie-1-gfp-tba-2]</i>	This study
JK816	<i>fem-3(q20gf)IV</i>	(Barton et al., 1987)
WH166	<i>zyg-1(it4) unc-4(e120)/mnC1 II; fem-3(q20gf) IV</i>	This study
WH165	<i>zyg-1(it29), unc-4(e120)/mnC1 II; fem-3(q20gf) IV</i>	This study
WH168	<i>zyg-1(it37) unc-4(e120)/mnC1 II; fem-3(q20gf) IV</i>	This study
OC271	<i>pPh-4.1(tm1598)/ hT2[qIs48] (I;III)</i>	This study
OC293	<i>pPh-4.1(tm1598)/ hT2[qIs48] (I;III); him-8(e1489) IV</i>	This study