

Suppl. Table I. Strains generated for this study

Strain	Genotype
BN3	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II</i>
BN10	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; let-60(n1046) IV.</i>
BN26	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; syls50[pkEx246 ($P_{cdh-3}::GFP$)] X</i>
BN37	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; syIs123[<i>unc-119(+)</i> $P_{fos-1}::yfp::fos-1A$]</i>
BN49	<i>ayIs4 [$P_{egl-17}::nls::gfp$] I; vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II</i>
BN50	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; ccIs4810[$P_{lmn-1}::lmn-1::gfp$] X</i>
BN53	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; vrIs13[$P_{vrk-1}::vrk-1::gfp$ <i>unc-119(+)</i>]</i>
BN54	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; unc-119(ed4) syIs80[<i>unc-119(+)</i>] <i>pPGF11.13($P_{lin-1}::nls::gfp$)] III</i></i>
BN55	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; syIs[<i>syEx920</i> ($P_{egl-43}::nls::yfp$)]</i>
BN72	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; syIs107[<i>unc-119(+)</i> $P_{lin-3}(\Delta pes-10)::gfp$].</i>
BN76	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; vrIs15[$P_{vrk-1}::vrk-1::gfp$ <i>unc-119(+)</i>]</i>
BN80	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; syls113[<i>syEx563</i>($P_{ost-1}::ost-1::gfp$)]</i>
BN81	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; zhIs4[pTB10 $P_{lip-1}::nls::gfp$] III</i>
BN82	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; ayIs2[$P_{egl-15}::nls::gfp$] IV</i>
BN118	<i>fos-1(ar105)/dpy-11(e224) unc-42(e270) V; vrIs13[$P_{vrk-1}::vrk-1::gfp$ <i>unc-119(+)</i>]</i>
BN121	<i>vrk-1(ok1181)/mIn1[mIs14 dpy-10(e128)] II; qyls50[$P_{cdh-3}::mCherry::moeABD$]</i>
BN123	<i>bqEx123[$P_{lin-31}::vrk-1(s)::eat-2(i)::vrk-1(as); rol-6(d)$]; ayIs4 I; rrf-3(pk1426) II; sid-1(qt2) V</i>
BN124	<i>bqEx124[$P_{lin-31}::vrk-1(s)::eat-2(i)::vrk-1(as); rol-6(d)$]; ayIs4 I; rrf-3(pk1426) II; sid-1(qt2) V</i>
YL255	<i>unc-119(ed3) III; vrIs13[$P_{vrk-1}::vrk-1::gfp$ <i>unc-119(+)</i>]</i>

Suppl. Table II. Mutation of *vrk-1* enhances LET-60 (Ras) gain-of-function phenotype.

Genotype	<i>n</i> ^a	Muv ^b (average ± S.D. ^c)
<i>vrk-1(ok1181)</i>	>100	0±0%
<i>let-60(n1046)</i>	432	70.7±9.6%
<i>let-60(n1046); vrk-1(ok1181)</i>	316	85.0±8.7%*

Homozygous L4 and young adults were mounted on microscope slides and observed with a 63x objective. ^aNumber of animals analyzed. ^bAverage Multivulva phenotype observed in four independent experiments at 20°C. ^cStandard deviation. *Statistically different from *let-60(n1046)* ($p < 0.001$ by Chi-square test).