

Table S6 Genetic analysis of *twk-1(lf)* for meiotic maturation and Unc phenotypes

A. *twk-1(lf)* suppresses *acy-4(lf)* sterility

Genotype	Brood size (\pm SD)	Number of animals scored
<i>acy-4(ok1806)</i>	1 (\pm 2)	30
<i>twk-1(tn1397); acy-4(ok1806)</i>	36 (\pm 25)	36
<i>twk-1(tn1397); acy-4(ok1806); tnEx180^a</i>	2* (\pm 7)	46
<i>twk-1(tn1397); acy-4(ok1806); tnEx181^b</i>	1* (\pm 1)	40

^a*tnEx180[twk-1(+)* *sur-5::gfp*]. *tnEx180* itself does not reduce brood size because *twk-1(tn1397); acy-4(ok1806)/nT1[qIs51]; tnEx180* hermaphrodites have 267 ± 36 (n=25) progeny.

^b*tnEx181[twk-1::gfp str-1::gfp]*. *twk-1(tn1397); acy-4(ok1806)/+* animals bearing *tnEx180* or *tnEx181* are not Unc, indicating rescue of the *twk-1* adult-onset Unc phenotype.

* $P < 0.00001$ compared to *twk-1(tn1397); acy-4(ok1806)* using Student's *t*-test.

B. The adult-onset Unc phenotype of *twk-1(tn1397)* requires *acy-4(+)*

Genotype	Percentage of Unc animals ^a	Number of animals scored
Wild type	0	152
<i>twk-1(tn1397)</i>	76	106
<i>twk-1(tn1397); tnEx180^b</i>	0	126
<i>twk-1(tn1397); acy-4(ok1806)</i>	0	93
<i>twk-1(tn1397); acy-4(ok1806); tnEx37^c</i>	93	94

^aL4 hermaphrodites were transferred to new NGM plates and observed approximately 24 hrs later for the *twk-1(tn1397)* Unc phenotype. All L4s tested did not show the Unc phenotype at the time of picking.

^b*tnEx180[twk-1(+)* *sur-5::gfp*].

^c*tnEx37[acy-4(+)* *sur-5::gfp*].