Table S1 ***sao-1*** **mutations do not affect the Egl defect of** ***lin-12*** **mutations**

Genotype	Temperature	% Egg laying proficiency (n)		
		sao-1(+)	*sao-1(ik1)*	*sao-1(ok3335)*
lin-12(n676n930)[a]	25°	1.6 (121)	2.1 (145)	0 (44)
lin-12(n676n930)[a]	15°	85 (318)	93 (251)	85 (112)
lin-12(n302)[b] */ +*	20°	45 (148)	41 (163)	ND
		% Hermaphrodites with 2AC[d] (n)		
		sao-1(+)	*sao-1(ik1)*	*sao-1(ok3335)*
lin-12(n676n930)[a,c]	25°	30 (94)	30 (113)	36 (33)

Hermaphrodites that were homozygous for either *sao-1(+), sao-1(ik1)* or *sao-1(ok3335)* and also had the indicated *lin-12* genotype were raised at the specified temperature and scored for egg laying proficiency or anchor cell (AC) development. Egg laying proficiency is defined as active laying for at least two consecutive days. n, number of animals scored. ND, not determined.

a *lin-12(n676n930)* causes a loss-of-function phenotype at 25°C and a gain-of-function phenotype at at 15°C(SUNDARAM and GREENWALD 1993a).

b *lin-12(302)* causes a gain-of-function phenotype that is semi-dominant(SUNDARAM and GREENWALD 1993a).

c Strains also contain the integrated AC-specific marker *zmp-1::gfp* which was used to identify ACs in early L4 stage hermaphrodites (pre-vulval indentation) (WANG and STERNBERG 2000).

d For comparison *lin-12(n676n930); sel-10(ar41)* yields only 3% 2AC(SUNDARAM and GREENWALD 1993b).

Table S2 *sao-1* mutations do not suppress the Egl defect of *sel-12*

	% Egg laying proficiency (n)		
Genotype	*sao-1(+)*	*sao-1(ik1)*	*sao-1(ok3335)*
se1-12(ty11)	0 (101)	0 (103)	0 (89)
se1-12(171)[a]	0 (98)	1 (104)	0 (95)
se1-12(131)[a]	0 (96)	4.2 (119)	0 (96)

Hermaphrodites that were homozygous for either *sao-1(+), sao-1(ik1)*, or *sao-1(ok3335)* and also had the indicated *sel-12* genotype were scored for egg laying proficiency. Egg laying proficiency is defined as active laying for at least two consecutive days. n, number of animals scored. ND, not determined.

a For comparison: Egg laying proficiency is observed among 20% of *sel-10(ar41); sel-12(171)* animals and 75% of *sel-10(ar41); sel-12(131)* animals (Wu *et al.* 1998).

Table S3 *sao-1(ik1)* does not improve the uterine π cell defect caused by *sel-12(ar171)*

Genotype	Uterine π cells/side (n)
sao-1(+); sel-12(+)	6.05 (38)
sel-12(ar171)[a]	0.11 (56)
sao-1(ik1); sel-12(ar171)[a]	0.09 (56)

The average number of uterine **π** cells per side was determined for mid L4 stage hermaphrodites (Christmas-tree stage) of the indicated genotypes. All strains contained the integrated **π**-cell specific marker *cog-2::gfp(HANNA-ROSE and HAN 1999)*. n, number of animals scored; only one side was counted per animal.
a sel-12(ar171) animals were also homozygous for the marker *unc-1(e538).*

Table S4 ***sao-1(ik1)*** **does not have a masculinizing effect similar to that of** ***sel-10*** **mutations**

Genotype	Temperature	% XX Male development [a] (n)	
		***sao-1*(+)**	***sao-1(ik1)***
tra-2(n1106)	20°	2.5 (321)	2.4 (332)
		% Egl Defect [b] (n)	
		***sao-1*(+)**	***sao-1(ik1)***
sel-10(n1077)/+	15°	28 (141)	28 (136)
sel-10(n1077)/+	20°	22 (106)	17 (135)
		%HSNs present [b] (n)	
		***sao-1*(+)**	***sao-1(ok3335)***
mgIs42 [tph-1::gfp]	20°	90 (55)	93 (80)

Hermaphrodites that were homozygous for either *sao-1(+), sao-1(ik1), or sao-1(ok3335)* and also had the indicated *tra-2*, *sel-10, or mgIs42* genotype were scored for male-type development as follows: *tra-2* animals were scored for development as males based on the presence of a male tail. *sel-10(n1077)/+* animals were scored for the inability to lay eggs (Egl) as an indicator of male-specific development of the hermaphrodite-specific vulval neurons (HSN) (JAGER *et al.* 2004). *mgIs42* animals were scored for the presence of HSN's by virtue of HSN-specific *tph-1::gfp* expression(SZE *et al.* 2000); the reported percentage reflects the number of observed HSN's divided by the total expected number of HSNs, which is twice the number of observed animals since two HSNs are expected in each hermaphrodite. n, number of animals scored.

a For comparison, Jager et al report 25% male-like development among *tra-2(n1106); sel-10(bc243)* animals(JAGER *et al.* 2004), and Desai and Horvitz report that all *tra-2(n1106); sel-10(n1077)* animals are all either male-like or intersexual(DESAI and HORVITZ 1989).

b Homozygous *sel-10(n1077)* hermaphrodites are partially masculinized in that the HSNs fail to develop, causing a fully penetrant Egl defect and observation of only 8% of the expected HSNs(JAGER *et al.* 2004).