

Table S2.

Statistics for lifespan experiments.

***eif-3.K/eif-3.L* Longevity Experiments, *daf-16* epistasis**

Experiment	Genotype	Mean lifespan ± SEM	P value vs control (Log rank test)	Percent Increase vs. Control	Number of worms	Comments
1	N2	13.3 ± 0.2	Control	Control	83/90	Performed at 25°C
	<i>eif-3.K(qd213)</i>	19.7 ± 0.3	< 0.0001	48.1	80/90	
	<i>eif-3.K(gk126)</i>	19.6 ± 0.3	< 0.0001	47.4	81/90	
2	N2	14.8 ± 0.2	Control	Control	85/90	Performed at 25°C Presented in Figure 2C
	<i>eif-3.K(qd213)</i>	20.4 ± 0.4	< 0.0001	37.8	88/90	
	<i>eif-3.K(gk126)</i>	19.3 ± 0.3	< 0.0001	30.4	89/90	
	<i>eif-3.L(gk485491)</i>	19.3 ± 0.4	< 0.0001	30.4	87/90	
	<i>daf-16(mu86)</i>	9.8 ± 0.1	Control	Control	89/90	
<i>daf-16(mu86); eif-3.K(gk126)</i>	10.2 ± 0.1	0.0132	4.1	85/90		
3	N2	15.4 ± 0.2	Control	Control	83/90	Performed at 25°C
	<i>eif-3.K(qd213)</i>	21.0 ± 0.3	< 0.0001	36.4	88/90	
	<i>eif-3.K(gk126)</i>	19.6 ± 0.4	< 0.0001	27.3	85/90	
	<i>eif-3.L(gk485491)</i>	20.6 ± 0.5	< 0.0001	33.8	78/90	
	<i>daf-16(mu86)</i>	9.9 ± 0.1	Control	Control	90/90	
<i>daf-16(mu86); eif-3.K(gk126)</i>	9.8 ± 0.1	0.7288	-1.0	83/90		
4	N2	15.5 ± 0.2	Control	Control	85/90	Performed at 25°C Presented in Figure 2A
	<i>eif-3.K(qd213)</i>	23.0 ± 0.3	< 0.0001	48.4	79/90	
	<i>eif-3.K(gk126)</i>	21.9 ± 0.4	< 0.0001	41.3	72/90	
	<i>eif-3.L(qd310)</i>	21.9 ± 0.4	< 0.0001	41.3	75/90	
	<i>eif-3.L(gk485491)</i>	22.7 ± 0.5	< 0.0001	46.5	71/90	
5	N2	18.3 ± 0.6	Control	Control	48/90	Performed at 20°C
	<i>eif-3.K(qd213)</i>	26.1 ± 0.5	< 0.0001	42.6	78/90	
	<i>eif-3.K(gk126)</i>	25.3 ± 0.5	< 0.0001	38.3	85/90	
	<i>daf-16(mu86)</i>	11.7 ± 0.2	Control	Control	79/90	
	<i>daf-16(mu86); eif-3.K(gk126)</i>	12.5 ± 0.2	0.0156	6.8	86/90	
6	N2	21.3 ± 0.5	Control	Control	47/90	Performed at 20°C
	<i>eif-3.K(qd213)</i>	34.4 ± 0.9	< 0.0001	61.5	75/90	
	<i>eif-3.K(gk126)</i>	27.4 ± 0.6	< 0.0001	28.6	82/90	
	<i>daf-16(mu86)</i>	12.7 ± 0.2	Control	Control	76/90	
<i>daf-16(mu86); eif-3.K(gk126)</i>	13.1 ± 0.2	0.1572	3.1	80/90		

RNAi Experiments

7	<i>eif-3.K(qd213)</i> on GFP RNAi	24.6 ± 0.5	Control	Control	89/90	Performed at 20°C Presented in Figure 2B
	<i>eif-3.K(qd213)</i> on <i>eif-3.A</i> RNAi	32.6 ± 0.5	< 0.0001	32.5	87/90	
	<i>eif-3.K(gk126)</i> on GFP RNAi	23.3 ± 0.4	Control	Control	88/90	
	<i>eif-3.K(gk126)</i> on <i>eif-3.A</i> RNAi	33.6 ± 0.6	< 0.0001	44.2	82/90	
8	<i>eif-3.K(qd213)</i> on GFP RNAi	24.3 ± 0.5	Control	Control	87/90	Performed at 20°C
	<i>eif-3.K(qd213)</i> on <i>eif-3.A</i> RNAi	35.0 ± 0.7	< 0.0001	44.0	80/90	
	<i>eif-3.K(gk126)</i> on GFP RNAi	22.6 ± 0.5	Control	Control	89/90	
	<i>eif-3.K(gk126)</i> on <i>eif-3.A</i> RNAi	33.3 ± 0.8	< 0.0001	47.3	89/90	
9	<i>eif-3.K(qd213)</i> on GFP RNAi	24.0 ± 0.4	Control	Control	89/90	Performed at 20°C
	<i>eif-3.K(qd213)</i> on <i>eif-3.A</i> RNAi	33.5 ± 0.7	< 0.0001	39.6	88/90	
	<i>eif-3.K(gk126)</i> on GFP RNAi	24.2 ± 0.4	Control	Control	90/90	
	<i>eif-3.K(gk126)</i> on <i>eif-3.A</i> RNAi	34.8 ± 0.7	< 0.0001	43.8	89/90	