

Table S1. All survival data. Repeats 1 are graphed in indicated figures.

Figures	Strain/Treatment	Mean survival time ± SEM (hours)	# Worms Censored/Total	P value
Fig 1A	WT	9.60 ± 0.30	1/40	
repeat 1	<i>skn-1</i> gof	8.05 ± 0.15	0/40	<0.001 ^a
Fig 1A	WT	8.42 ± 0.24	1/40	
repeat 2	<i>skn-1</i> gof	7.27 ± 0.20	2/40	<0.001 ^a
Fig 1A	WT	10.71 ± 0.32	6/45	
repeat 3	<i>skn-1</i> gof	9.26 ± 0.29	0/46	0.002 ^a
Fig 1B	WT	24.50 ± 2.39	2/41	
repeat 1	<i>skn-1</i> gof	15.09 ± 1.16	1/40	<0.001 ^a
Fig 1B	WT	23.47 ± 1.18	1/40	
repeat 2	<i>skn-1</i> gof	15.00 ± 0.82	0/40	<0.001 ^a
Fig 1B	WT	22.50 ± 1.14	0/40	
repeat 3	<i>skn-1</i> gof	13.20 ± 0.57	0/40	<0.001 ^a
Fig 1C	WT	19.80 ± 1.73	0/40	
repeat 1	<i>skn-1</i> gof	12.30 ± 0.30	0/40	<0.001 ^a
Fig 1C	WT	34.84 ± 3.25	1/37	
repeat 2	<i>skn-1</i> gof	18.56 ± 2.39	0/39	<0.001 ^a
Fig 1C	WT	33.26 ± 2.43	0/35	
repeat 3	<i>skn-1</i> gof	15.64 ± 1.58	1/33	<0.001 ^a
Fig 1G	WT	13.54 ± 0.30	0/35	
repeat 1	<i>skn-1</i> gof	11.51 ± 0.31	2/34	<0.001 ^a
	<i>daf-16</i>	11.20 ± 0.31	3/35	<0.001 ^a
	<i>skn-1</i> gof; <i>daf-16</i>	11.18 ± 0.22	0/34	<0.001 ^a 0.671 ^b
Fig 1G	WT	13.58 ± 0.28	2/35	
repeat 2	<i>skn-1</i> gof	11.31 ± 0.25	0/35	<0.001 ^a
	<i>daf-16</i>	11.6 ± 0.35	0/35	<0.001 ^a
	<i>skn-1</i> gof; <i>daf-16</i>	10.91 ± 0.27	2/35	<0.001 ^a 0.721 ^c
Fig 1G	WT	12.91 ± 0.26	0/35	
repeat 3	<i>skn-1</i> gof	10.42 ± 0.33	1/35	<0.001 ^a
	<i>daf-16</i>	10.86 ± 0.33	0/35	<0.001 ^a
	<i>skn-1</i> gof; <i>daf-16</i>	10.3 ± 0.31	1/35	<0.001 ^a 0.704 ^c

Fig 2A	WT	7.40 ± 0.18	1/40	
repeat 1	<i>skn-1</i>	12.34 ± 0.32	0/41	<0.001 ^a
Fig 2A	WT	10.93 ± 0.28	0/41	
repeat 2	<i>skn-1</i>	12.34 ± 0.32	0/41	<0.001 ^a
Fig 2A	WT	9.95 ± 0.32	0/41	
repeat 3	<i>skn-1</i>	12.10 ± 0.31	2/41	<0.001 ^a
Fig 2B	WT	10.93 ± 0.28	0/41	
repeat 1	<i>skn-1</i>	12.34 ± 0.32	0/41	<0.001 ^a
	<i>daf-16</i>	9.02 ± 0.18	0/43	<0.001 ^a
	<i>skn-1; daf-16</i>	8.80 ± 0.31	1/41	0.958 ^b
Fig 2B	WT	10.00 ± 0.27	0/41	
repeat 2	<i>skn-1</i>	11.14 ± 0.31	0/42	0.004 ^a
	<i>daf-16</i>	9.41 ± 0.20	0/41	0.050 ^a
	<i>skn-1; daf-16</i>	8.88 ± 0.32	0/41	0.530 ^b
Fig 2B	WT	9.95 ± 0.32	0/41	
repeat 3	<i>skn-1</i>	12.10 ± 0.31	2/41	<0.001 ^a
	<i>daf-16</i>	9.00 ± 0.20	1/41	0.006 ^a
	<i>skn-1; daf-16</i>	9.40 ± 0.29	6/41	0.169 ^b
Fig 2E	<i>daf-2</i> control RNAi	21.47 ± 0.52	2/33	
repeat 1	<i>daf-2 skn-1</i> RNAi	23.94 ± 0.60	0/33	<0.001 ^a
Fig 2E	<i>daf-2</i> control RNAi	19.67 ± 0.65	0/33	
repeat 2	<i>daf-2 skn-1</i> RNAi	22.23 ± 0.64	3/33	0.006 ^a
Fig 2E	<i>daf-2</i> control RNAi	18.76 ± 0.57	0/34	
repeat 3	<i>daf-2 skn-1</i> RNAi	21.29 ± 0.71	2/34	0.004 ^a
Fig 3C	WT	13.92 ± 0.39	0/36	
repeat 1	<i>skn-1</i> gof	10.92 ± 0.36	1/37	<0.001 ^a
	<i>vit-2</i> OE	9.86 ± 0.26	1/36	<0.001 ^a
	<i>skn-1</i> gof; <i>vit-2</i> OE	10.63 ± 0.25	1/36	<0.001 ^a 0.445 ^c
Fig 3C	WT	17.75 ± 0.74	0/36	
repeat 2	<i>skn-1</i> gof	13.48 ± 0.65	1/36	<0.001 ^a
	<i>vit-2</i> OE	14.83 ± 0.51	0/36	<0.001 ^a
	<i>skn-1</i> gof; <i>vit-2</i> OE	13.63 ± 0.47	1/36	<0.001 ^a 0.555 ^c
Fig 3C	WT	12.89 ± 0.39	0/36	

repeat 3	<i>skn-1</i> gof	10.66 ± 0.36	2/36	<0.001 ^a
	<i>vit-2</i> OE	10.03 ± 0.34	0/39	<0.001 ^a
	<i>skn-1</i> gof; <i>vit-2</i> OE	10.06 ± 0.35	1/36	<0.001 ^a 0.784 ^e
Fig 3E	WT	12.60 ± 0.55	0/35	
repeat 1	<i>skn-1</i> gof	11.22 ± 0.45	3/35	0.039 ^a
	<i>vit-2</i>	13.76 ± 0.53	2/36	0.169 ^a
	<i>skn-1</i> gof; <i>vit-2</i>	13.46 ± 0.57	0/37	0.215 ^a
Fig 3E	WT	13.26 ± 0.54	0/38	
repeat 2	<i>skn-1</i> gof	11.68 ± 0.44	3/38	0.013 ^a
	<i>vit-2</i>	12.78 ± 0.52	2/38	0.431 ^a
	<i>skn-1</i> gof; <i>vit-2</i>	13.34 ± 0.55	6/38	0.234 ^a
Fig 3E	WT	12.08 ± 0.49	0/36	
repeat 3	<i>skn-1</i> gof	9.93 ± 0.55	2/36	0.026 ^a
	<i>vit-2</i>	11.03 ± 0.58	1/36	0.294 ^a
	<i>skn-1</i> gof; <i>vit-2</i>	11.67 ± 0.59	1/36	0.822 ^a
Fig S1A	WT	9.47 ± 0.32	15/40	
repeat 1	<i>skn-1</i> gof	24.60 ± 0.41	0/40	<0.001 ^a
Fig S1A	WT	8.67 ± 0.50	0/36	
repeat 2	<i>skn-1</i> gof	29.67 ± 1.2	0/36	<0.001 ^a
Fig S1A	WT	9.32 ± 0.48	0/38	
repeat 3	<i>skn-1</i> gof	24.65 ± 1.52	0/37	<0.001 ^a
Fig S1B	WT	9.34 ± 0.21	3/39	
repeat 1	<i>skn-1(lax188)</i>	8.21 ± 0.14	0/39	<0.001 ^a
Fig S1B	WT	8.60 ± 0.20	0/40	
repeat 2	<i>skn-1(lax188)</i>	7.35 ± 0.16	1/40	<0.001 ^a
Fig S1B	WT	9.50 ± 0.23	0/40	
repeat 3	<i>skn-1(lax188)</i>	8.58 ± 0.20	0/38	0.002 ^a
Fig S1C	WT	18.70 ± 1.16	0/40	
repeat 1	<i>skn-1(lax188)</i>	11.05 ± 0.58	0/40	<0.001 ^a
Fig S1C	WT	16.09 ± 1.15	3/42	
repeat 2	<i>skn-1(lax188)</i>	12.29 ± 0.28	1/42	0.001 ^a
Fig S1C	WT	15.41 ± 1.05	0/41	
repeat 3	<i>skn-1(lax188)</i>	11.65 ± 0.45	1/40	0.002 ^a
Fig S1D	WT control RNAi	8.56 ± 0.30	0/32	

repeat 1	WT <i>wdr-23</i> RNAi	7.28 ± 0.19	0/36	<0.001 ^a
Fig S1D	WT control RNAi	7.92 ± 0.34	0/36	
repeat 2	WT <i>wdr-23</i> RNAi	6.27 ± 0.19	2/36	<0.001 ^a
Fig S1D	WT control RNAi	8.06 ± 0.38	0/35	
repeat 3	WT <i>wdr-23</i> RNAi	7.24 ± 0.28	0/34	0.035 ^a
Fig S1E	WT control RNAi	25.20 ± 1.02	0/40	
repeat 1	WT <i>wdr-23</i> RNAi	14.70 ± 0.79	0/40	<0.001 ^a
Fig S1E	WT control RNAi	13.00 ± 0.99	4/40	
repeat 2	WT <i>wdr-23</i> RNAi	9.20 ± 0.29	0/40	<0.001 ^a
Fig S1E	WT control RNAi	25.23 ± 0.95	0/39	
repeat 3	WT <i>wdr-23</i> RNAi	15.00 ± 0.82	0/40	<0.001 ^a
Fig S3A	WT control RNAi	13.24 ± 0.62	1/31	
repeat 1	WT <i>skn-1</i> RNAi	18.09 ± 0.68	0/32	<0.001 ^a
Fig S3A	WT control RNAi	9.00 ± 0.26	0/40	
repeat 2	WT <i>skn-1</i> RNAi	15.53 ± 0.55	0/40	<0.001 ^a
Fig S3A	WT control RNAi	8.98 ± 0.20	0/41	
repeat 3	WT <i>skn-1</i> RNAi	15.29 ± 0.31	2/41	<0.001 ^a
Fig S3D	<i>glp-1</i>	14.03 ± 0.37	0/38	
repeat 1	<i>glp-1; skn-1</i>	15.63 ± 0.31	4/36	0.005 ^d
Fig S3D	<i>glp-1</i>	15.33 ± 0.48	0/36	
repeat 2	<i>glp-1; skn-1</i>	16.57 ± 0.61	3/36	0.039 ^d
Fig S3D	<i>glp-1</i>	16.7 ± 0.57	4/38	
repeat 3	<i>glp-1; skn-1</i>	18.3 ± 0.47	1/39	0.04 ^d

^a vs WT/control RNAi

^b vs *daf-16*

^c vs *skn-1* *gof*

^d vs *glp-1*

^e vs *vit-2* OE