

**Table 4: Effect of RNAi-depletion of individual *skr* genes on the lifespans of long-lived mutants and wild-type worms**

Trial	Gene	Cosmid	Mean Lifespan ± SEM (days)	Events/ Obs <sup>*</sup>	P value vs. control <sup>†</sup>	% effect on lifespan <sup>‡</sup>
<b><i>daf-2(mu150)</i></b>						
1. <sup>§</sup>	Control <sup>  </sup>		33.4 ± 0.7	89/90		
	<i>daf-16</i> <sup>  </sup>		17.3 ± 0.5	80/83	<0.0001	-48.0
	<i>skr-1</i> <sup>  </sup>	F46A9.5	22.0 ± 0.5	88/91	<.0001	-34.1
	<i>skr-2</i> <sup>  </sup>	F46A9.4	22.8 ± 0.4	92/92	<.0001	-31.7
	<i>skr-3</i>	F44G3.6	30.0 ± 0.4	80/88	0.49	-10.1
	<i>skr-5</i>	F47H4.10	28.8 ± 0.7	89/90	<.0001	-13.7
	<i>skr-7</i>	Y47D7A.1	33.5 ± 0.6	89/91	.81	ne
	<i>skr-8</i>	C52D10.9	34.5 ± 0.6	96/98	.18	+3.2
	<i>skr-11</i>	F13A7.9	31.4 ± 0.9	83/86	.22	-5.9
	<i>skr-12</i>	C52D10.6	34.7 ± 0.7	88/90	.13	+3.8
	<i>skr-13</i>	C52D10.8	33.8 ± 1.1	37/90	.50	+1.1
	<i>skr-15</i>	F54D10.1	29.7 ± 0.9	89/90	.003	-11.0
	<i>skr-19</i>	R12H7.3	33.2 ± 0.6	83/83	.54	ne
	<i>skr-20</i>	R12H7.5	33.3 ± 0.7	93/93	.75	ne
2.	Control		28.9 ± 0.6	68/90		
	<i>daf-16</i>		15.6 ± 0.4	87/89	<0.0001	-46.0
	<i>skr-1</i>	F46A9.5	22.7 ± 0.4	72/85	<.0001	-21.4
	<i>skr-2</i>	F46A9.4	16.0 ± 0.3	85/90	<.0001	-44.6
	<i>skr-3</i>	F44G3.6	28.2 ± 0.5	88/90	0.31	-2.4
	<i>skr-5</i>	F47H4.10	nt			
	<i>skr-7</i>	Y47D7A.1	26.3 ± 0.5	86/89	0.002	-8.9
	<i>skr-8</i>	C52D10.9	27.7 ± 0.7	84/90	0.78	-4.1
	<i>skr-11</i>	F13A7.9	25.3 ± 0.7	73/90	0.001	-12.4
	<i>skr-12</i>	C52D10.6	27.4 ± 0.6	83/90	0.18	-5.1
	<i>skr-13</i>	C52D10.8	26.1 ± 0.4	84/88	<.0001	-9.6
	<i>skr-15</i>	F54D10.1	nt			
	<i>skr-19</i>	R12H7.3	27.1 ± 0.6	84/93	0.09	-6.2
	<i>skr-20</i>	R12H7.5	26.3 ± 0.7	57/63	0.007	-8.9
<b><i>glp-1(e2141ts)</i></b>						
1. <sup>§</sup>	Control		24.3 ± 1.1	77/80		
	<i>daf-16</i>		20.2 ± 0.4	69/74	<0.0001	-16.8
	<i>skr-1</i>	F46A9.5	25.0 ± 0.6	49/50	0.31	ne
	<i>skr-2</i>	F46A9.4	23.2 ± 0.6	70/73	0.06	-4.5
	<i>skr-3</i>	F44G3.6	29.3 ± 0.5	60/73	0.0008	+20.5
	<i>skr-5</i>	F47H4.10	27.1 ± 1.0	71/75	0.21	+11.5
	<i>skr-7</i>	Y47D7A.1	28.5 ± 1.0	70/75	0.01	+17.2
	<i>skr-8</i>	C52D10.9	25.3 ± 1.0	67/72	0.87	+4.1
	<i>skr-11</i>	F13A7.9	26.4 ± 0.5	70/75	0.38	+8.6
	<i>skr-12</i>	C52D10.6	32.6 ± 1.2	62/76	<0.0001	+34.1

Trial	Gene	Cosmid	Mean Lifespan ± SEM (days)	Events/ Obs*	P value vs. control†	% effect on lifespan‡
	<i>skr-13</i>	C52D10.8	29.9 ± 0.5	70/75	0.01	+23.0
	<i>skr-15</i>	F54D10.1	25.9 ± 1.4	68/75	0.14	+6.5
	<i>skr-19</i>	R12H7.3	30.1 ± 1.3	71/76	0.0009	+23.8
	<i>skr-20</i>	R12H7.5	30.3 ± 1.2	71/77	0.0017	+24.6
<b>2.</b>	<i>Control</i>		23.2 ± 0.4	86/87		
	<i>daf-16</i>		17.8 ± 0.4	79/84	<.0001	-23.2
	<i>skr-1</i>	F46A9.5	21.6 ± 0.7	70/86	.73	-6.8
	<i>skr-2</i>	F46A9.4	nt			
	<i>skr-3</i>	F44G3.6	25.5 ± 0.9	66/89	<.0001	+9.9
	<i>skr-5</i>	F47H4.10	nt			
	<i>skr-7</i>	Y47D7A.1	26.4 ± 0.8	76/88	<.0001	+13.7
	<i>skr-8</i>	C52D10.9	24.5 ± 0.6	86/88	.0004	+5.6
	<i>skr-11</i>	F13A7.9	27.1 ± 0.9	73/83	<.0001	+16.8
	<i>skr-12</i>	C52D10.6	25.2 ± 0.8	73/80	<.0001	+8.6
	<i>skr-13</i>	C52D10.8	25.1 ± 0.9	73/83	<.0001	+8.1
	<i>skr-15</i>	F54D10.1	26.5 ± 0.8	70/83	0.0855	+14.2
	<i>skr-19</i>	R12H7.3	27.1 ± 0.9	83/89	<.0001	+16.8
	<i>skr-20</i>	R12H7.5	22.9 ± 0.6	85/88	.04	-1.2
<b>N2</b>						
<b>1.</b>	<i>Control</i> <sup>¶</sup>		20.7 ± 0.7	67/88		
	<i>daf-16</i> <sup>¶</sup>		16.6 ± 0.5	67/87		-19.8
	<i>skr-1</i> <sup>¶</sup>	F46A9.5	20.7 ± 0.7	82/86	0.71	ne
	<i>skr-2</i> <sup>¶</sup>	F46A9.4	21.4 ± 0.9	67/81	0.19	+3.3
	<i>skr-5</i>	F44G3.6	23.0 ± 0.7	77/87	0.005	+11.1
	<i>skr-7</i>	F47H4.10	19.0 ± 0.6	67/83	0.13	-8.2
	<i>Control</i>		18.0 ± 0.5	67/89		
	<i>daf-16</i>		15.9 ± 0.5	63/90	0.0006	-11.6
	<i>skr-8</i>	C52D10.9	17.8 ± 0.6	60/90	0.59	-1.1
	<i>skr-11</i>	F13A7.9	18.0 ± 0.5	69/91	0.6	ne
	<i>skr-12</i>	C52D10.6	19.0 ± 0.6	47/76	0.17	+5.5
	<i>skr-13</i>	C52D10.8	19.1 ± 0.6	65/89	0.09	+6.1
	<i>skr-15</i>	F54D10.1	17.6 ± 0.6	61/90	0.99	-2.2
	<i>skr-19</i>	R12H7.3	18.3 ± 0.6	55/83	0.5	+1.6
	<i>skr-20</i>	R12H7.5	18.0 ± 0.7	66/89	0.49	ne

\* Some animals were censored as described in Material and Methods.

† Control refers to worms exposed to empty vector plasmid without an RNAi insert.

‡ suppression (-) or extension (+) of lifespan compared to control worms grown on empty vector alone.

§ Lifespans conducted in parallel.

¶ Experiment depicted in Fig. 3.

nt: not tested.

ne: no effect

Of the 21 predicted *skr* gene family members, we could not test some because the RNAi clones were not available in the feeding RNAi library described in (1) (*skr-4*, *skr-6* and *skr-16*), or were found to be contaminated with clones targeting other genes (*skr-9*, *skr-10*, *skr-14*, *skr-17*, *skr-18* and *skr-21*). Of these, we could test *skr-9*, *skr-10* and *skr-21* using the respective clones from an alternative RNAi library (2) and found no discernable phenotypes (data not shown).

1. Kamath RS, Fraser AG, Dong Y, Poulin G, Durbin R, Gotta M, Kanapin A, Le Bot N, Moreno S, Sohrmann M, *et al.* (2003) *Nature* 421:231-237.
2. Lamesch P, Milstein S, Hao T, Rosenberg J, Li N, Sequerra R, Bosak S, Doucette-Stamm L, Vandenhaute J, Hill DE, *et al.* (2004) *Genome Res* 14:2064-2069.