

Supplementary figures

Figure S1

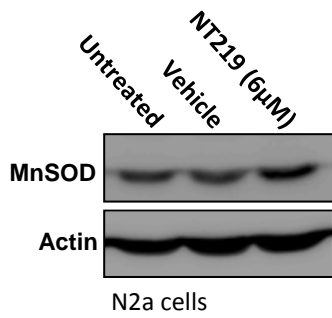


Figure S2

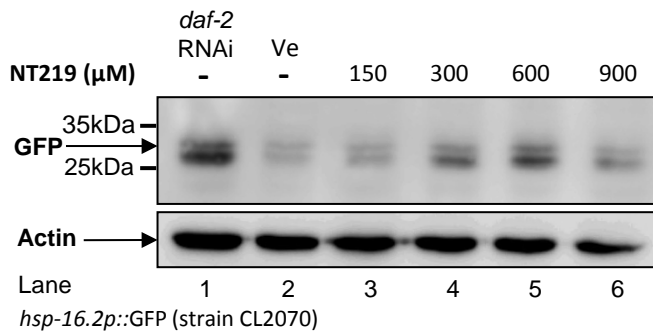


Figure S3

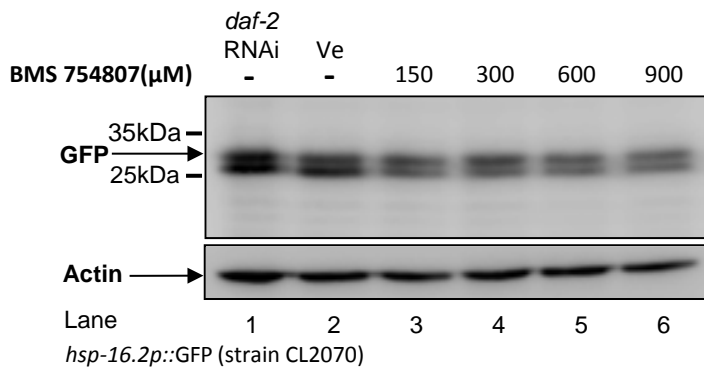


Figure S4

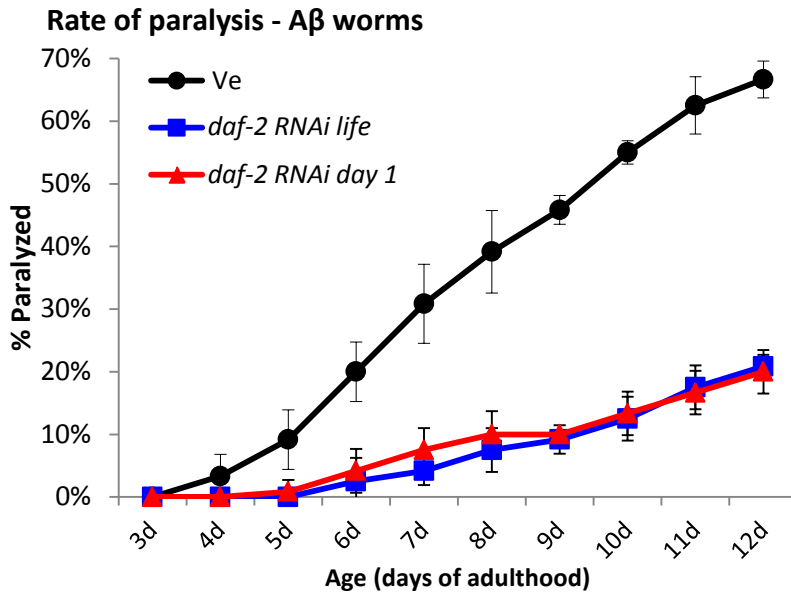


Figure S5

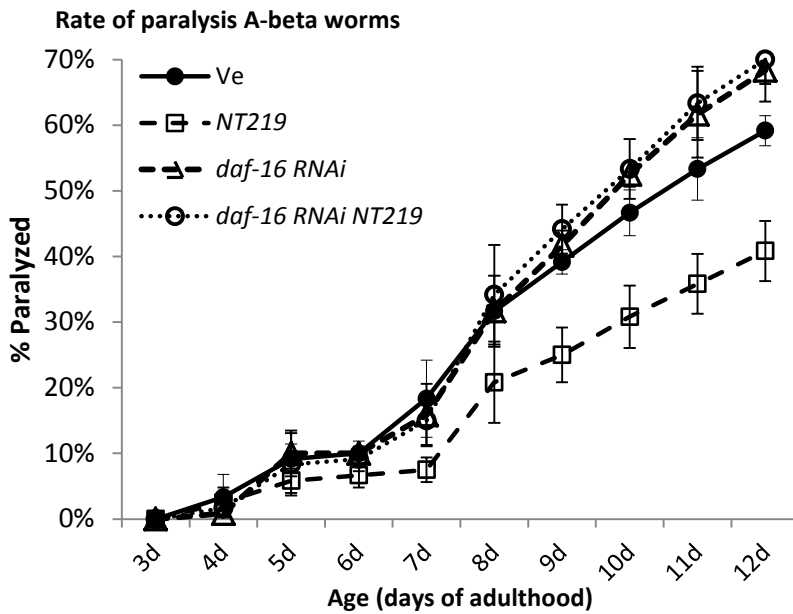
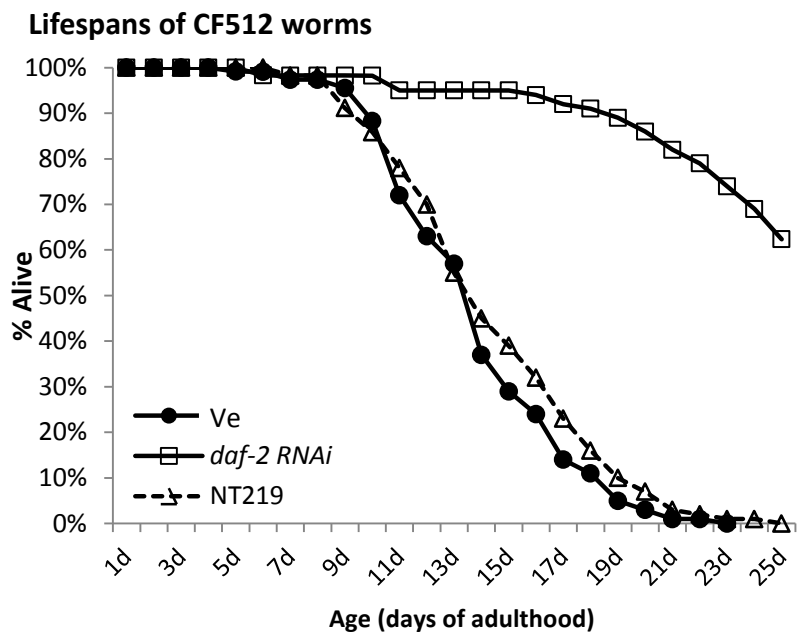


Figure S6



Supplementary table 1

Relative motility of polyQ35-YFP worms (corresponding figure 4C)

Strain	Treatment	n	Average speed ($\mu\text{m}/\text{sec}$)		Relative speed day 1/day 11	<i>p</i> value (day 11)		
			day 1	day 11		vs. polyQ0-YFP (EV)	vs. polyQ35-YFP (EV)	vs. polyQ35-YFP (<i>daf-2</i> RNAi)
polyQ0-YFP	None (EV)	56	46.4 \pm 1.41	14.74 \pm 0.75	31.8%			
polyQ35-YFP	None (EV)	56	69.65 \pm 2.07	6.14 \pm 0.38	8.8%	<0.0001		
polyQ35-YFP	<i>daf-2</i> RNAi	56	54.0 \pm 1.93	40.7 \pm 0.89	75.4%	<0.0001	<0.0001	
polyQ35-YFP	NT219	56	51.21 \pm 1.49	16.87 \pm 0.84	32.9%	>0.05	<0.0001	<0.0001

Supplementary table 2

Lifespans (corresponding figures 6C, D)

Strain	Treatment	Mean lifespan \pm SEM (days)	number of animals / initial number	% lifespan of control	P value (against control)
CF512	EV	13.28 \pm 0.24	119 / 120		
	EV-Vel	13.46 \pm 0.26	116 / 120	101	0.61
	EV-NT219	13.47 \pm 0.24	114 / 120	101	0.56
	<i>daf-2</i> RNAi	24.07 \pm 0.83	114 / 120	181	2.62E-28
N2	Ve	18.42 \pm 0.44	91 / 109		
	EV-NT219	18.45 \pm 0.49	83 / 108	100	0.43
	<i>daf-2</i> RNAi	33.35 \pm 1.32	93 / 113	181	8.87E-21