



Figure S4: Extended transgenerational longevity and reduced fertility of *spr-5* mutant worms is independent of *daf-16* and *kri-1*

A) Venn diagram representing the overlap between transgenerational *spr-5* genes [4] and *daf-12* regulated genes [24]. $p = 3.37 \times 10^{-9}$, hypergeometric probability. **B**) *daf-16* knock down decreases *spr-5*(*by101*) mutant worm lifespan at generation 15 to a similar extent as it decreases wild type worm lifespan (2 way ANOVA $p=0.3361$). Statistics are presented in Table S5. **C**) *daf-16* knock down does not significantly alter the reduced egg laying capacity of generation 15 *spr-5*(*by101*) mutant worms. Graph represents the mean \pm SEM of 2 independent experiments: each experiment consists of 3 replicates of 10 worms each. ** $p < 0.01$, *** $p < 0.001$ by t-test, ns not significant by two-way ANOVA. **D**) *kri-1* knock down does not significantly alter the *spr-5*(*by101*) lifespan extension at generation 15 (2 way ANOVA $p=0.1831$). Statistics are presented in Table S5. **E**) *kri-1* knock down does not significantly alter the reduced egg laying capacity of generation 15 *spr-5*(*by101*) mutant worms. Graph represents the mean \pm SEM of 2 independent experiments: each experiment consists of 3 replicates of 10 worms each. ** $p < 0.01$, *** $p < 0.001$ by t-test, ns not significant by two-way ANOVA. **F**) Generation 9 *spr-5*(*by101*) mutant worms display higher levels of *daf-36* mRNA compared to wildtype worms. Graph represents the mean \pm SEM of 2 independent experiments: each experiment consists of 3 biological replicates of 100 worms each. * $p < 0.01$ by multiple t-test corrected for multiple comparisons using the Holm-Sidak method.