

Supplementary Figure 3 A neural sub-circuit is required for sensing and transducing mitochondrial stress. (A) Neurons not able to induce peripheral UPR^{mt} when *spg-7* is deleted. Quantification of *hsp-6p*::GFP reporter induction in animals expressing Cas9-*spg-7*-sg under neural-specific promoters is shown. n>=29, error bars indicate mean ±SE. (B) Peripheral induction of *hsp-6p*::GFP in animals containing Cas9-

spg-7-sg in two types of sensory neurons. n>=30, error bars indicate mean \pm SE. A Student's t-test is used to assess significance. (**C**) Lifespan analysis of *hsp-6p*::GFP control strain and transgenic lines containing *spg-7* knockout in each indicated neurons.