



**Figure S2. Deficiency in the longevity-regulating transcription factors HSF-1, SKN-1, PHA-4, and DAF-9/DAF-12 does not abolish the ability of IL1 neurons to promote lifespan at cool temperatures.**

(A-F) IL1 neurons promote lifespan driven by *IL1::trpa-1* transgene, an effect that was not blocked by deficiency in HSF-1 (B), SKN-1 (C), PHA-4 (D), DAF-9 (E), or DAF-12 (F). p values are indicated (log-rank).

(G) *hsp-4p::GFP* (UPR<sup>ER</sup> reporter), *hsp-6p::GFP* (UPR<sup>mt</sup> reporter), and *hsp-16.2p::GFP* (HSR reporter) are not up-regulated in worms expressing *IL1::trpa-1* transgene. n ≥ 30. Error bars: SEM. On the contrary, *hsp-4p::GFP* marker is even slightly decreased in *IL1::trpa-1* worms (\*p < 0.01 t test). Experiments were performed at 20 °C.