

Supplementary Data

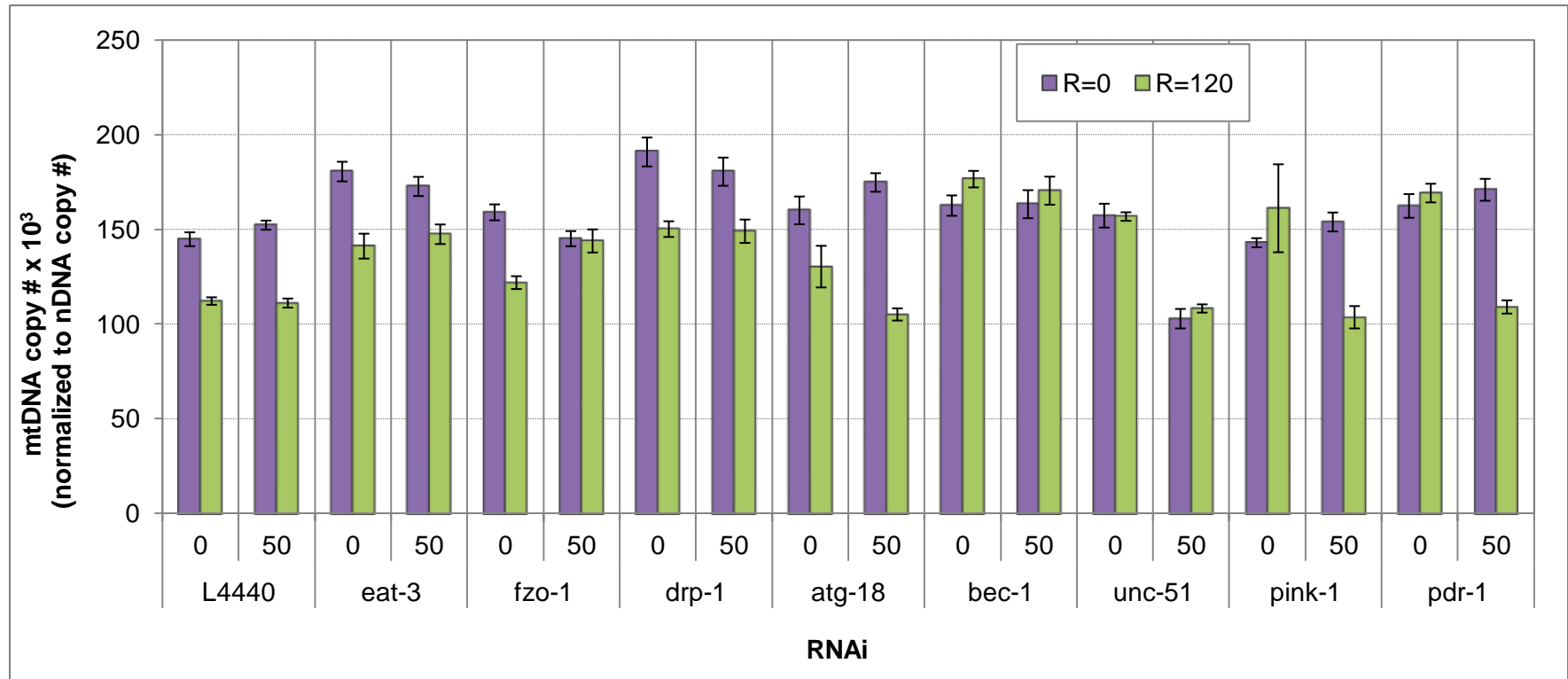


Figure S1. mtDNA copy number does not increase 120 h post UVC exposure (0, 50 J/m²) in RNAi-treated *C. elegans* (*glp-1*). Three-way ANOVA indicated a significant effect of strain ($p=0.0009$) and time ($p<0.0001$) but no significant effect of UVC exposure ($p=0.1018$) and no significant interactions of strain, time and exposure. Bars \pm s.e.m.

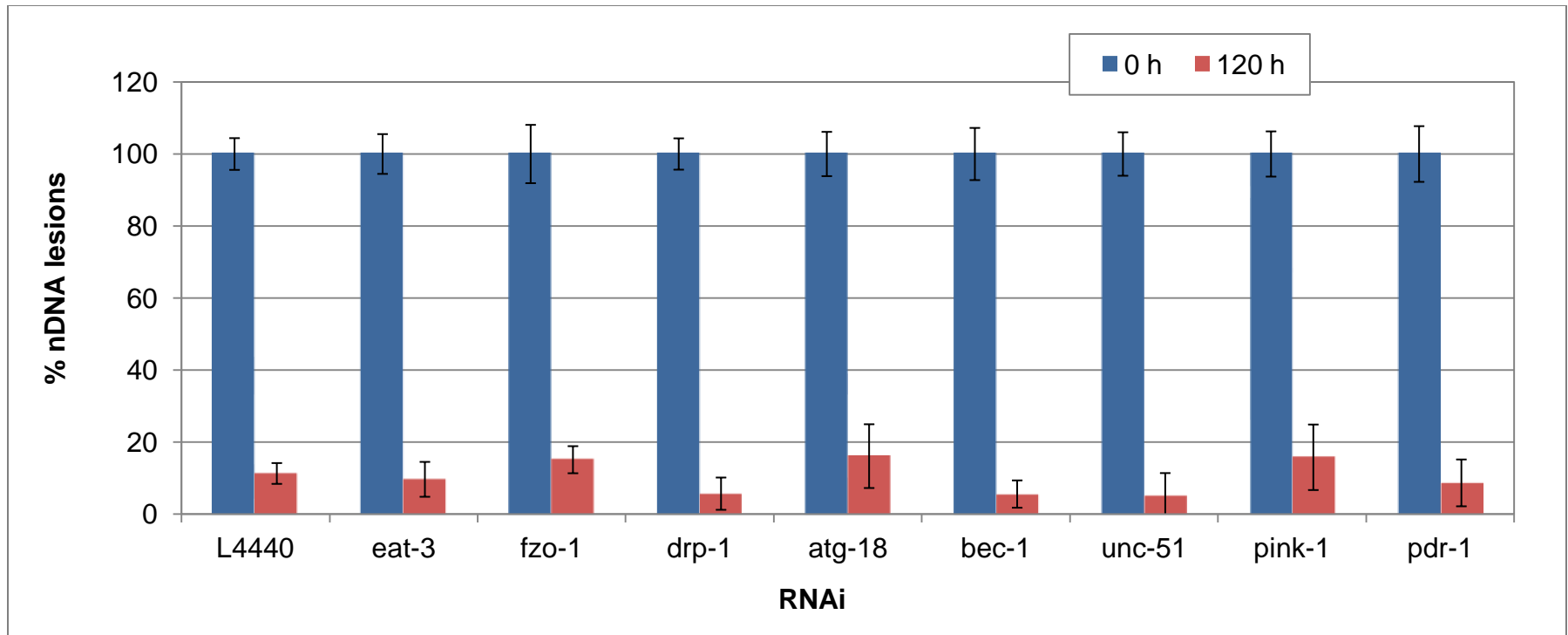


Figure S2. Nuclear DNA damage is repaired after a single dose of UVC in post-mitotic adult *C. elegans* (*glp-1*). Nematodes were exposed to UVC and analyzed for DNA damage immediately (0 h), or after 24, 48, or 72 h. Percent nDNA lesions remaining after 120 hours was calculated based on 0 h lesion frequency within each RNAi treatment. Bars \pm s.e.m.

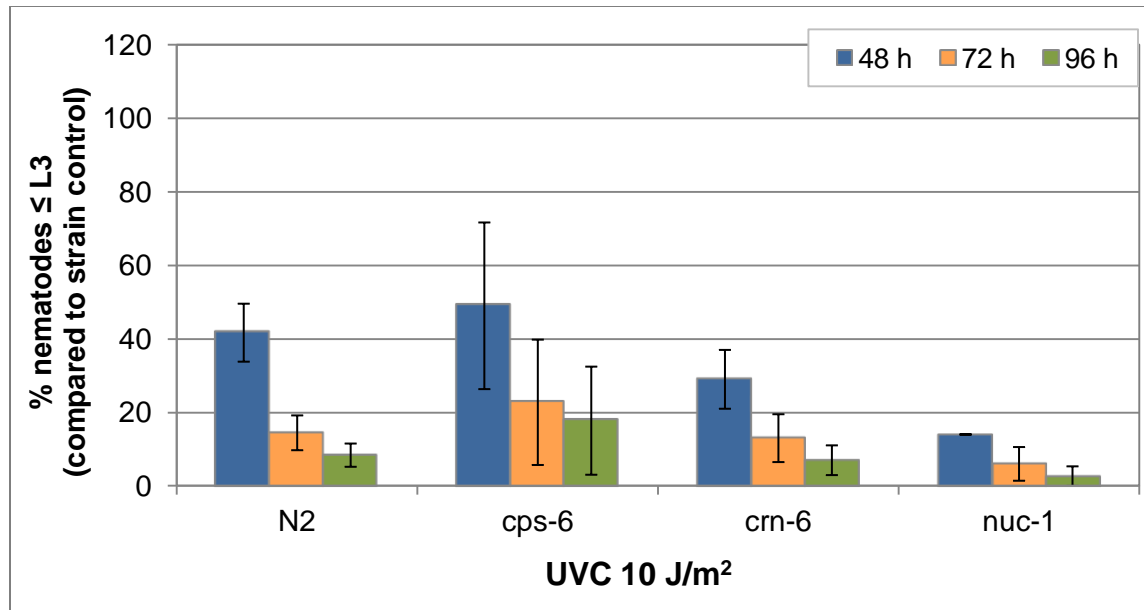


Figure S3. Mutations in endonuclease genes do not exacerbate L3 arrest following serial UVC exposure. Mutations in endonuclease genes *cps-6* (*C.elegans* homolog to endonuclease G), *crn-6* and *nuc-1* do not exacerbate L3 arrest compared to wild-type at 48, 72 or 96 h. Two-way ANOVA indicated no significant differences in the effect of UVC exposure on larval arrest between mutant and wild-type (Statview 5.0.1). Bars \pm s.e.m.