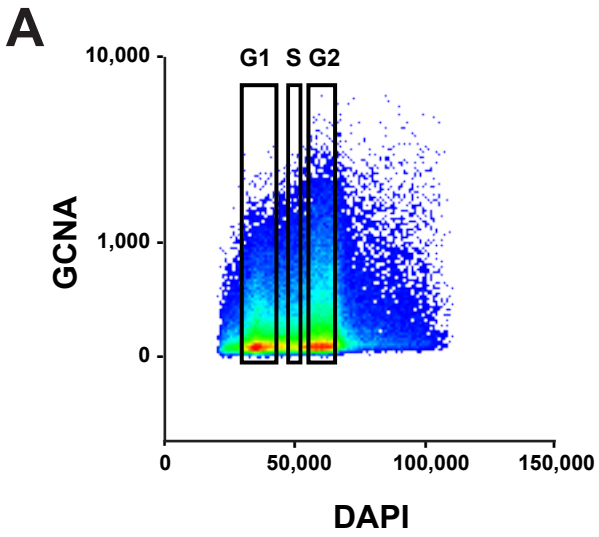

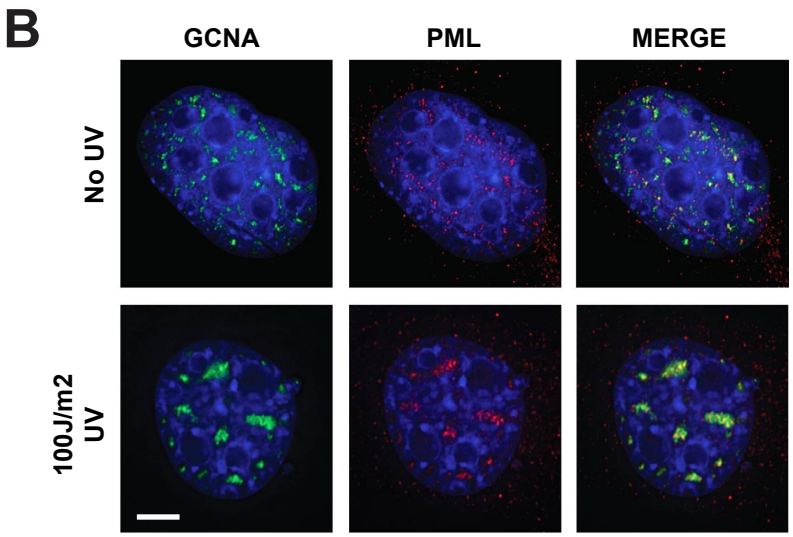

Stage	Fold Increase over G1	SD
G1	1.00	0.00
S	1.31	0.03
G2/M	1.60	0.05

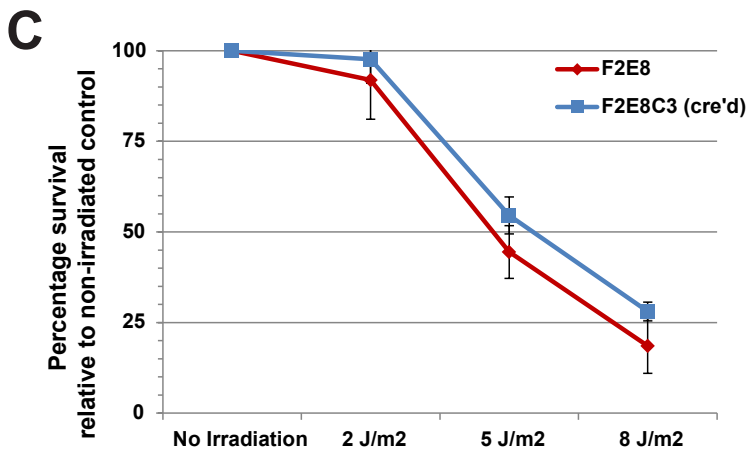

Figure S4: Related to Figure 4 and Table S5. GCNA expression and wild-type and *Gcna*-mutant responses to UV irradiation in mouse ES cells. (A) Flow cytometry analysis of cell cycle and GCNA expression in mouse ES cells. (B) Wild-type ES cells were irradiated with 100 J/m2 UV and immunostained with anti-GCNA (green) and anti-PML (red) antibodies. DNA is stained with DAPI. Each panel shows the nucleus of a single ES cell. Scale bar = 5 μm. (C) ES cells were treated with various doses of UV irradiation and monitored using a colony survival assay. ES cell lines carry the *Gcna* allele that is described in (Carmell et al., 2016). Briefly, F2E8 harbors Cre-recombinase sites flanking Exon 4 of the *Gcna* gene. F2E8C3 is the same cell line after treatment with Cre-recombinase, which deletes Exon 4, causing a frameshift affecting the remaining exons, drastically reducing the amount of mRNA transcribed from the *Gcna* gene. t-test; p>0.1 at all doses.