Role of p53 isoforms in the DNA damage response during Drosophila oogenesis

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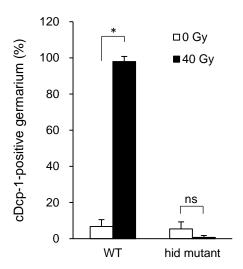


Fig. S1 The wild type and *hid* mutant (hid[05014]/Df(3L)H99) females were irradiated at 40 Gy and cleaved Dcp-1 (cDcp-1) staining was performed with the ovaries 6 h after irradiation. The percentages of cDcp-1-positive germline cells in the germarium region 2 were determined. The values are the mean  $\pm$  SD of two independent experiments (ns p > 0.05, \* p < 0.05). At least 118 germarium in total were counted for each sample.

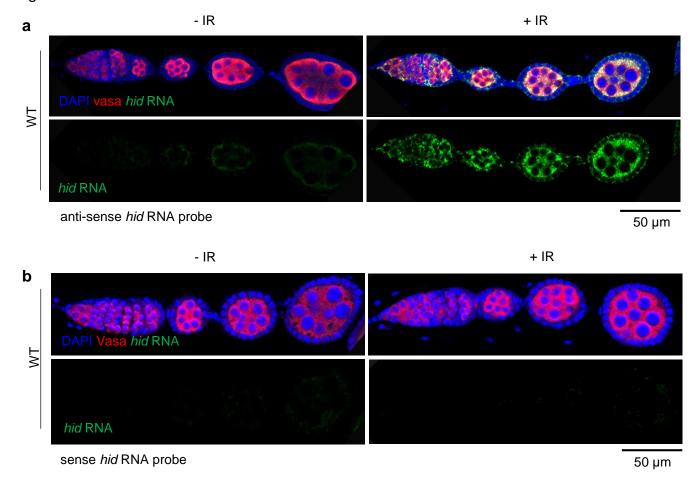


Fig. S2 Expression pattern of the *hid* transcript after irradiation. Wild type females were irradiated at 40 Gy and after 3-4 h RNA fluorescent *in situ* hybridization and protein immunofluorescence double labeling was performed using Dig-labeled anti-sense (a) or sense (b) *hid* RNA as a probe and antibody against Vasa.

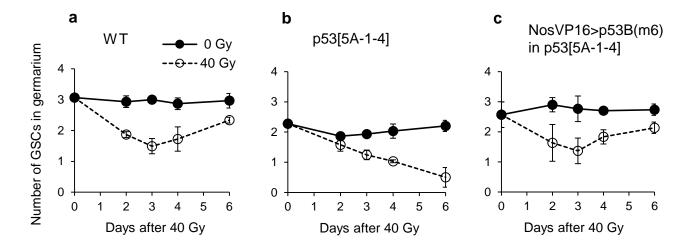
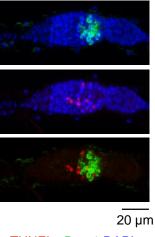


Fig. S3. The number of germline stem cells after irradiation in wild type and p53 mutant females. Females of indicated genotype (a: wild type, b:  $p53^{5A-1-4}$ , c: GAL4-NosVP16/UASp-p53B;  $p53^{5A-1-4}$ ) were irradiated at 0 or 40 Gy and the ovaries were dissected and stained with 1B1, Vasa, and Lamin C to detect fusome, germline cells, and cap cells, respectively. The average number of germline stem cells in the germarium was determined. Values are mean  $\pm$  SD for at least two independent experiments. At least 28 germarium in total were counted for each sample.



TUNEL cDcp-1 DAPI

Fig. S4 Wild type adult females were irradiated at 3 Gy and dying cells in the ovary were detected by TUNEL and cleaved Dcp-1 (cDcp-1) double staining. Representative images of TUNEL (red) and cDcp-1 (green)-positive germarium 6 h after 3 Gy irradiation are shown. DAPI (blue) staining shows DNA.

Fig. S5. Uncropped images of western blots of Fig. 3a.

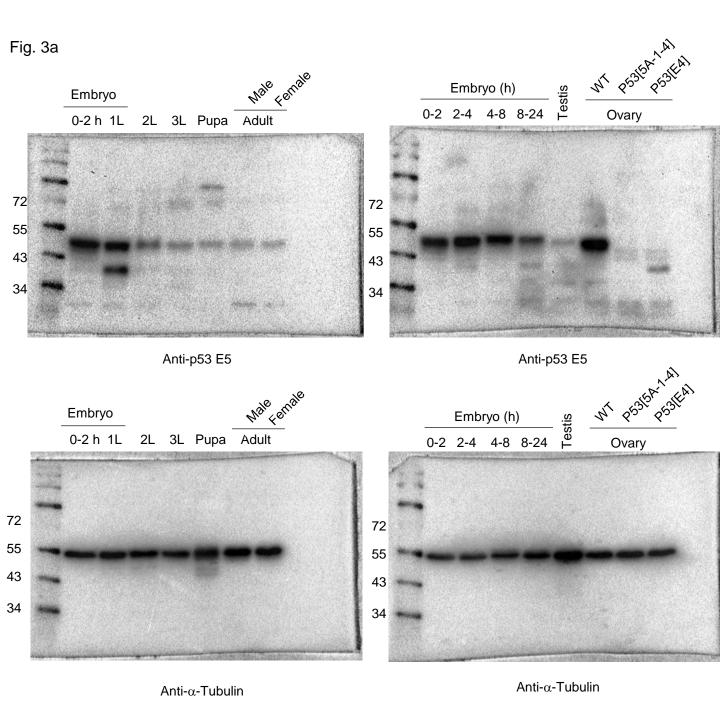
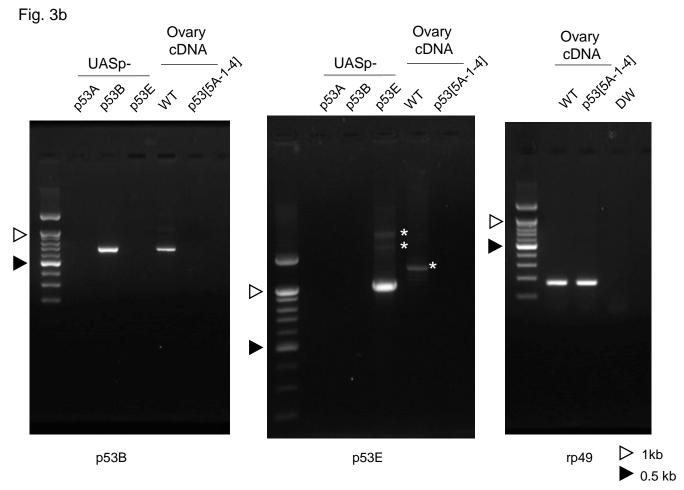


Fig. S5. Uncropped images of western blots of Fig. 3b and 3c.



Bands indicated with \* may be non-specific signal.

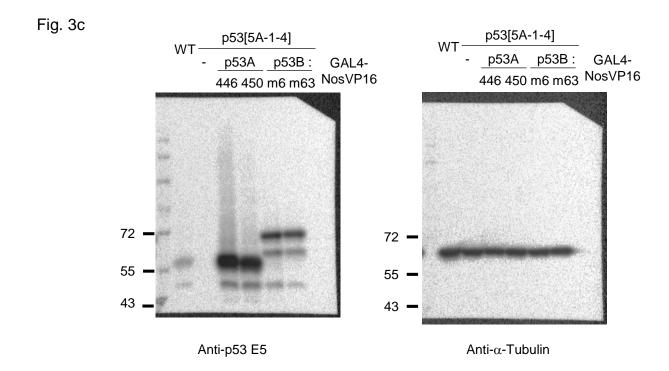


Fig. S5. Uncropped images of western blots of Fig. 4a.

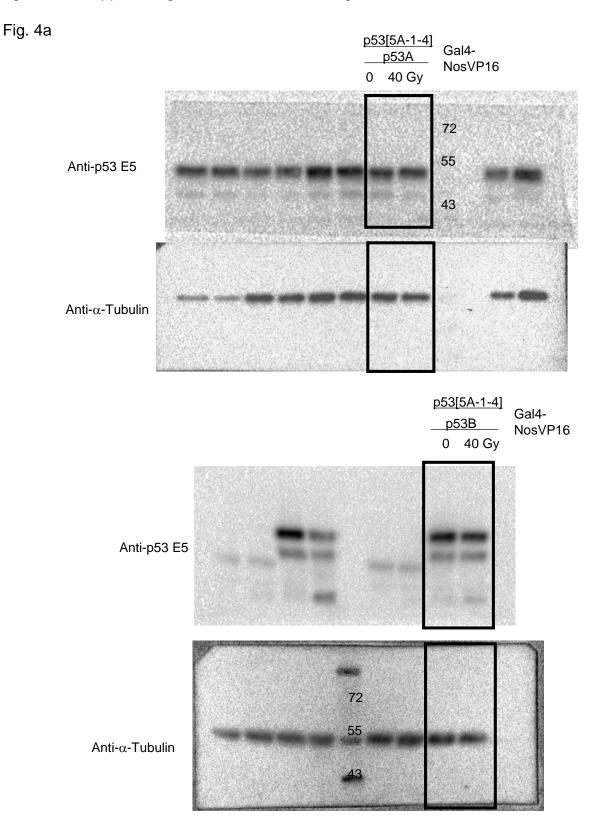


Fig. S5. Uncropped images of western blots of Fig. 4b and 6a.

