



**Fig. S1: Cell proliferation, *macpiwi*, *macboule* and *macactin* expression dynamics, one hour after final radiation exposure (protocol P1).** (A<sub>1</sub>-A<sub>6</sub>) Cell proliferation drastically decreased upon radiation exposure (0-90 Gy). Note the significant reduction in somatic cell proliferation at higher radiation doses (A<sub>3</sub>-A<sub>6</sub>). In contrast, reduced proliferation was still clearly visible in the gonads (arrowheads). (B<sub>1</sub>-B<sub>6</sub>) *Macpiwi* expression one hour after radiation (0-90 Gy) was eliminated in somatic stem cells. Worms irradiated with higher doses (75-90 Gy) also showed a strong reduction in *macpiwi* expression in gonadal cells (B<sub>5</sub>-B<sub>6</sub>). (C<sub>1</sub>-C<sub>6</sub>) *Macboule* expression one hour post-irradiation. Note the dose-dependent reduction in *macboule* expression. (D<sub>1</sub>-D<sub>6</sub>) Expression of the housekeeping gene *macactin* one hour post-irradiation. *Macactin* expression remained almost unchanged, irrespective of the radiation dose applied. In all figures, anterior is to the top. The scale bar (100 μm) is representative for all worms.