

## **Additional File**

**to**

### **Overexpression of the *Drosophila* ATR homologous checkpoint kinase Mei-41 induces a G2/M checkpoint in *Drosophila* imaginal tissue**

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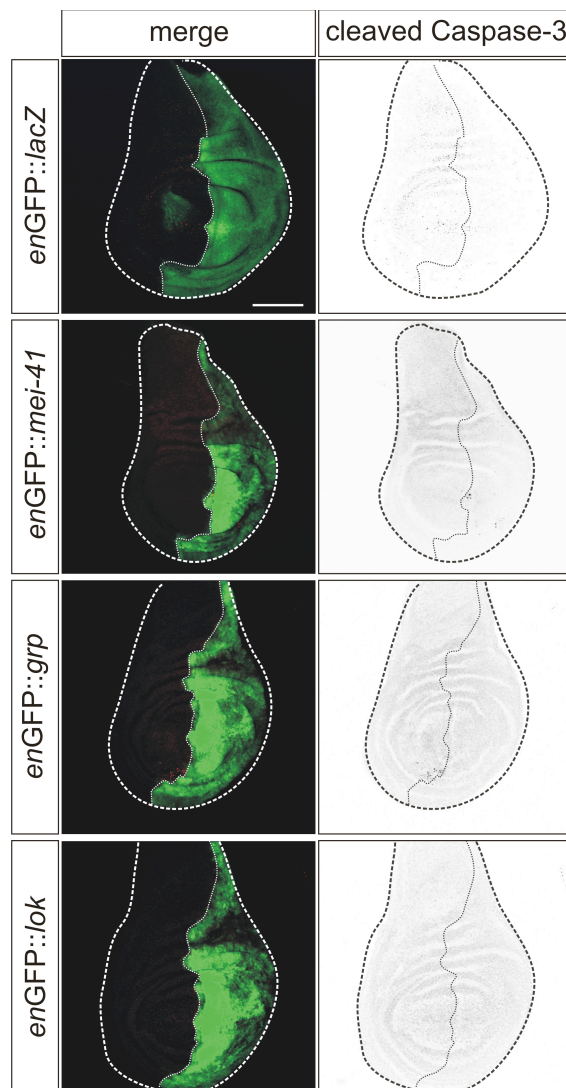
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**The Additional file contains the Figures S1 and S2**

**Figure S1      Overexpression of *mei-41* has no effect on apoptosis**

**Figure S2      Increased apoptosis is observed in irradiated discs after *lok* overexpression**

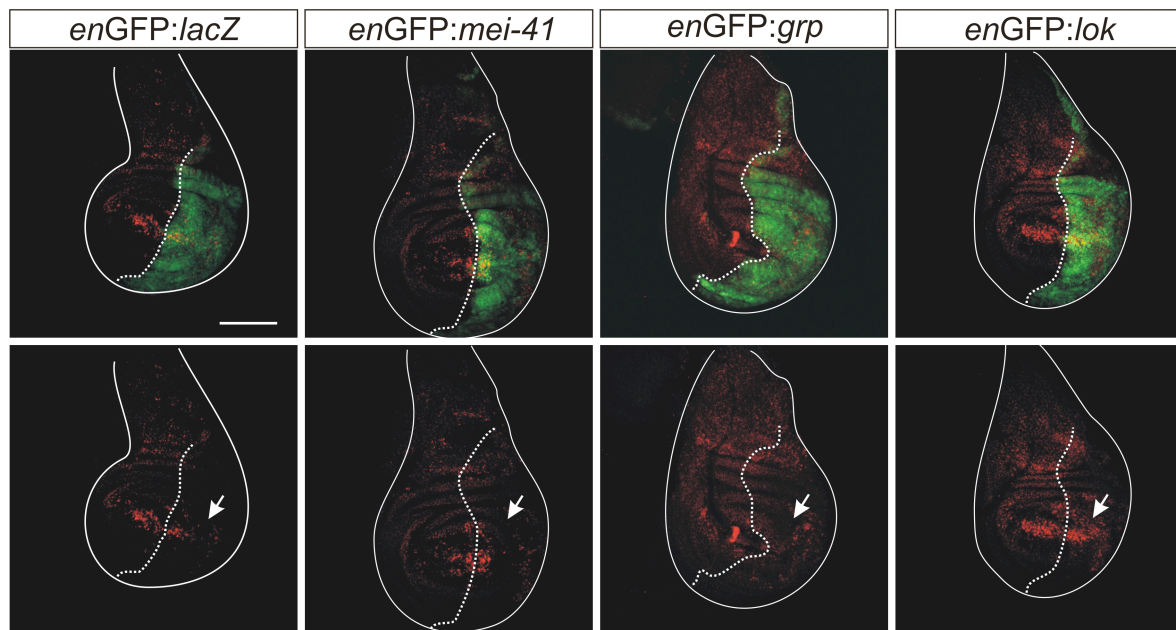
**Figure S1      Overexpression of *mei-41* has no effect on apoptosis**



**Figure S1**

The checkpoint kinase genes *mei-41*, *grp*, and *lok* (Chk2) as indicated were overexpressed in the posterior compartment of wing imaginal discs using *en*-Gal4-GFP (shown in green in the merge panel). UAS-*lacZ* served as control. Cleaved Caspase-3 was detected by antibody staining (shown in red in the merge panel) to determine cell death induction in the given genotypes. The staining is shown in the right panel inversed for visibility purposes. Size bar represents 100  $\mu$ m in all panels.

**Figure S2**      **Increased apoptosis is observed in irradiated discs after *lok* overexpression**



**Figure S2**

Either *lacZ*, *mei-41*, *grp* or *lok* was overexpressed with *en*-Gal4-GFP as indicated; larval imaginal discs were examined 6h after irradiation with 40 Gy. Cleaved Caspase-3 (red) was used to visualize the amount of cell death in consequence of IR-stress and recovery thereafter. The posterior compartment, highlighted with GFP (shown in green in the upper panel), is marked with a dotted line. Only the overexpression of *lok* but neither of *mei-41* nor *grp*, resulted in a pronounced enhancement of Caspase-3 activity (arrows), i.e. induction of apoptosis. Size bar represents 100  $\mu$ m in all panels.