

Figure S4. Sensitivity of *ku70* mutants to gamma radiation and transgene rescue. Results suggest that homozygous *ku70* mutants are mildly hypersensitive to  $\gamma$  radiation but are fully rescued by the *P*{*gDmKu70*}*13* transgene. (A) Embryos from the cross shown were exposed to a <sup>137</sup>Cs source during the first or second day after eggs were laid. Survivors were then scored as in Fig. S3. (B) Observed/expected ratios were computed as in Fig. S3 except that the expected numbers were one-fourth of the total *TM6B* heterozygotes. The factor of 1/4 instead of 1/2 arises because *TM6B* is heterozygous in both parents. No formal hypothesis tests were computed in the absence of independent

replicates, but approximate standard errors were calculated se  $SE = 4\sqrt{k(t-k)/t^3}$  under the same assumptions as in Fig. S3.