Figure S2  Schematic of the GMR-based F1 screen for new Hto inserts. Flies with the Hto Starter chromosome (green) were crossed to MiT flies, and the offspring were heat-shocked to induce Minos transposase expression (red arrow), generating mosaic males bearing new hops of Hto. In this example Minos transposase mobilized Hto to a new site on chromosome 3 (asterisk). The mosaic males were crossed to driver flies (GMR-GAL4) to induce expression in the F1 offspring of any new Hto inserts (blue arrow). The F1 were scored for eye defects; mutants were retained and crossed to balancer flies (typically TM3/TM6) to establish a stock as indicated. In subsequent crosses a single fly, lacking all other chromosomes from the original mosaic fly, was selected to initiate a clean, isogenic stock (not shown). Hops to X, Starter, and the MiT, SM6a chromosome were also recovered, and isolated in a similar manner using the appropriate balancers.