

**Table S1: Adult survival of *kdm5* alleles.**

<i>kdm5</i> allele combination	number of <i>kdm5</i> mutants	total adult flies	Expected number	% expected	<i>p</i> value (Chi squared)
<i>kdm5</i> [10424/10424]; +/+	3	650	216	1.40%	< 0.001
<i>kdm5</i> [10424/10424]; <i>gKDM5</i> /+	40	110	37	108%	ns
<i>kdm5</i> [K06801/K06801]; +/+	0	300	100	0%	< 0.001
<i>kdm5</i> [K06801/K06801]; <i>gKDM5</i> /+	39	125	42	93%	ns
<i>kdm5</i> [10424/K06801]; +/+	87	440	147	59%	< 0.001
<i>kdm5</i> [10424/K06801]; <i>gKDM5</i> /+	70	200	67	104%	ns

Crosses were carried out to generate the genotypes indicated in the left-most column.