



Supplemental Figure 1. Molecular characterization of the *lys*¹ mutation. (A) A schematic diagram illustrating the genomic region surrounding *LKRSDH* that was sequenced using a PCR based strategy. Horizontal lines represent the PCR products generated for this analysis. (B) The resulting PCR products from both *w*¹¹¹⁸ and *w*¹¹¹⁸; *lys*¹ mutants were analyzed using gel electrophoresis. Numbers below each set of bands correspond to the genomic regions underlined in (A). Note that the genomic region containing exon 2 fails to amplify in *w*¹¹¹⁸; *lys*¹ mutants. (C) Genomic DNA from *w*¹¹¹⁸ controls and *w*¹¹¹⁸; *lys*¹ mutants were analyzed using a Southern blot to detect the second *LKRSDH* exon. (D) The DNA sequence of the *lys*¹ insertion. Lower case letters represent the insertion. '...' represents the large stretch of repetitive sequence present within the insertion. The deleted sequence is denoted with a line through the text. The start codon is boxed. (E) qRT-PCR analysis of *LKRSDH* in *w*¹¹¹⁸ controls and *w*¹¹¹⁸; *lys*¹ mutants. *** p < 0.001.