

## Description of Additional Supplementary Files

**File Name: Supplementary Data 1**

**Description:** Information about the libraries used in the study.

**File Name: Supplementary Data 2**

**Description:** Fold upregulation of canonical transposons in HP1aGLKD[2] ovaries in comparison to sibling control: RNA-seq data was aligned to canonical transposons and fold increase in FPKM values in HP1aGLKD[2] ovaries is represented.

**File Name: Supplementary Data 3**

**Description:** Reduction in the total and Piwi-bound piRNAs mapping to canonical transposon families in HP1aGLKD ovaries.

**File Name: Supplementary Data 4**

**Description:** Reduction in the total and Piwi-bound piRNAs uniquely mapping to piRNA clusters in HP1aGLKD ovaries.

**File Name: Supplementary Data 5**

**Description:** Average number of piRNAs (unique and mutimapper) mapping to insertions belonging to different transposon families in *D. melanogaster* in control ovaries.

**File Name: Supplementary Data 6**

**Description:** List of primers used in the study.