

Table S2. Tissue-level enrichment analysis. Tissues with an overrepresentation of differentially expressed genes with at least 200% the expression level in whole flies ($P < 0.05$) are highlighted in bold.

| Tissue | P value | Odds ratio | Expected count | Count | Total genes |
|-----------------------------|--------------|--------------|----------------|------------|-------------|
| Brain | 0.015 | 1.164 | 284.47 | 331 | 1241 |
| Head | 1 | 0.382 | 264.76 | 101 | 1155 |
| Eye | 1 | 0.662 | 244.59 | 162 | 1067 |
| Thoracic abdominal ganglion | 0.277 | 1.046 | 273.47 | 286 | 1193 |
| Salivary gland | 0.999 | 0.773 | 312.9 | 242 | 1365 |
| Crop | 0.999 | 0.8 | 232.21 | 181 | 1013 |
| Midgut | 1 | 0.541 | 240.46 | 130 | 1049 |
| Tubule | 1 | 0.687 | 218.45 | 150 | 953 |
| Hindgut | 1 | 0.547 | 217.54 | 119 | 949 |
| heart | 1 | 0.529 | 215.47 | 114 | 940 |
| Fat body | 1 | 0.631 | 237.71 | 150 | 1037 |
| 2.20E- | | | | | |
| Ovary | 16 | 2.134 | 300.29 | 641 | 1310 |
| Virgin spermatheca | 1 | 0.645 | 226.25 | 146 | 987 |
| Mated spermatheca | 1 | 0.639 | 233.12 | 149 | 1017 |
| Carcass | 1 | 0.316 | 275.53 | 87 | 1202 |