Supplemental Information

Transient and Specific Inactivation

of Drosophila Neurons In Vivo

Using a Native Ligand-Gated Ion Channel

Wendy W. Liu and Rachel I. Wilson

Author Contributions

W.W.L. and R.I.W. designed research, W.W.L. performed research, W.W.L. analyzed data, and W.W.L. and R.I.W. wrote the manuscript.
Figure S1. Histamine Immunoreactivity in Selected Regions of the Drosophila Central Nervous System

(A) As expected, photoreceptors are histamine immunopositive; this image shows photoreceptor terminals in the medulla (MED) and lamina (LAM) of the optic lobe.

(B) The antennal lobe (AL) is devoid of histaminergic fibers, while the ventrolateral protocerebrum (VLP) is densely innervated.

(C) The antennal mechanosensory and motor center (AMMC, outlined by dashed line) is devoid of histamine immunoreactivity.

(D) Most of the subesophageal ganglion (SOG) contains no histamine immunoreactivity, except for the ventral edge, which is densely labeled.

(E) Histaminergic fibers sparsely innervate the three pairs of neuromeres in the thoracic ganglion, but are absent from the abdominal ganglion (AG).

In addition, we observed that the mushroom body and central complex were also devoid of histamine immunoreactivity (see Movies S1 and S2). All images are z projections through depths of several microns. Histamine immunoreactivity is in green, with neuropil (nc82 immunoreactivity) in magenta. See Experimental Procedures for details. Scale bars represent 20 µm.