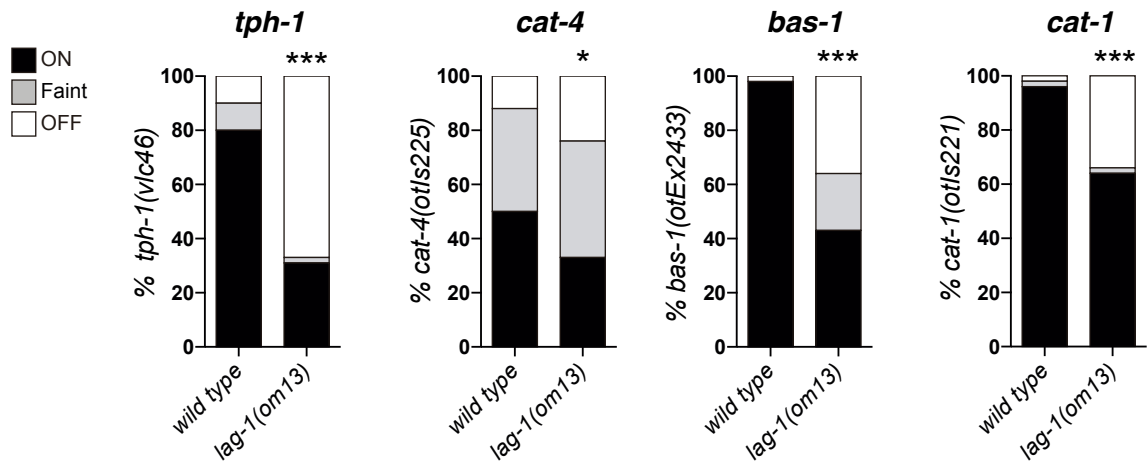
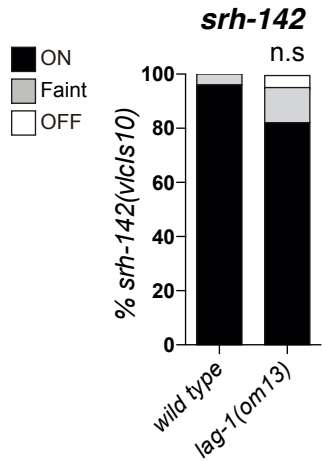


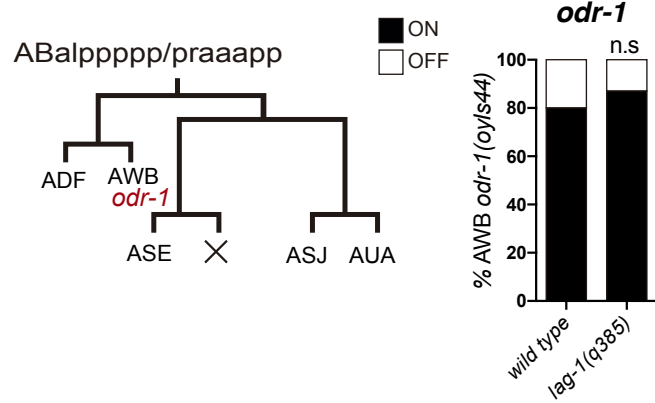
**A** Serotonin pathway genes



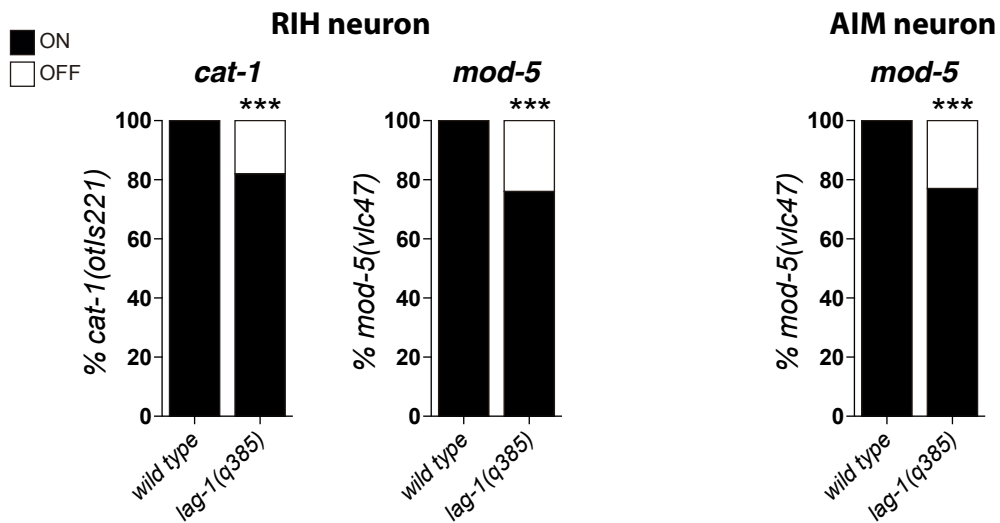
**B** Additional effector genes



**C** ADF lineage analysis



**D** LAG-1 role on serotonin re-uptaker neurons



Supplementary Figure 2

**Supplementary Figure 2. *lag-1* mutants show expression defects in ADF serotonergic neuron and RIH and AIM serotonin re-uptaker neurons.**

A) Quantification of *lag-1(om13)* hypomorphic mutant phenotypes shows significant expression defects for serotonin pathway genes. See S1 Data for numerical values.

B) *lag-1(om13)* mutants do not show expression defects in *srh-142(vlc1s10)* effector gene. See S1 Data for numerical values.

C) *lag-1(q385)* ADF lineage analysis. Expression of *odr-1(oyls44)* in AWB, sister cell of ADF, is unaffected in *lag-1(q385)* mutants. See S1 Data for numerical values.

D) *lag-1(q385)* null mutant shows significant expression defects for *mod-5(vlc47)* in RIH and AIM neurons and *cat-1(otls221)* in RIH neuron. See S1 Data for numerical values.