



**Figure S2** Aminergic cell counts in *dVMAT* mutants. (A, B) *dVMAT* mutants possess a reduced number of dopaminergic neurons in the DL2 cluster but are otherwise comparable to WT. (A) The arrangement of DA neuron clusters are pictured in wild-type larva with the broken rectangle indicating the DL2 cluster. Inset shows a representative image of DL2 cluster in the wild-type (WT) and *dVMAT* mutant (-/-). (B) Quantitation of each DA cluster (white bars: WT; black bars mutant, n=8 animals per genotype, mean +/- SEM) shows that there are significantly fewer neurons in DL2 in the mutant as compared WT (two way ANOVA,  $p < 0.0001$ , Bonferroni post test,  $***p < 0.001$  as indicated). Differences between the number of octopaminergic (C, D) or serotonergic (E, F) neurons in WT (n=9) versus mutant (n=12) are not detectable for each indicated cluster. Scale bars A, B, C: 50  $\mu$ m; A inset: 10  $\mu$ m.