

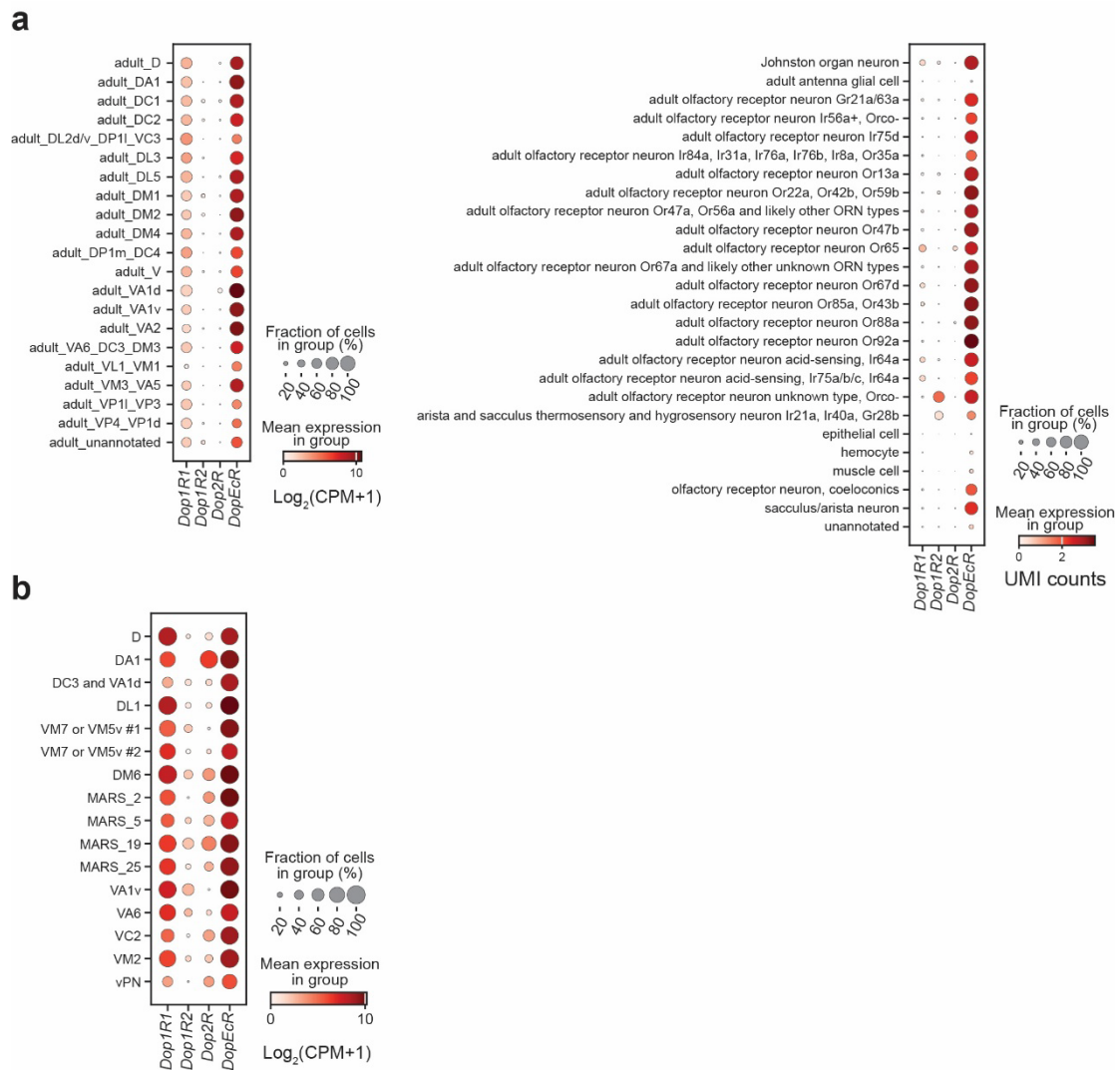


Figure S1: Expression of DA receptors in ORNs observed in scRNA sequencing experiments.

A. Left, DA receptor expression in ORNs, from dataset published by McLaughlin et al.¹. DopEcR is strongly expressed in all cell types, as is Dop1R1, to a lesser extent. Expression of Dop1R2 and Dop2R is much lower and less abundant. **Right**, DA receptor expression in antennal cell types, including ORNs, from dataset published by Li et al.². As in the ORN dataset, DopEcR is widely expressed in ORNs. In contrast, Dop1R1 expression observed in this dataset is less abundant in ORNs.

B. DA receptor expression in PNs from dataset published by Xie et al.³. DopEcR and Dop1R1 are highly expressed in PNs. Dop1R2 and Dop2R expression levels are slightly lower and less abundant across PN types.

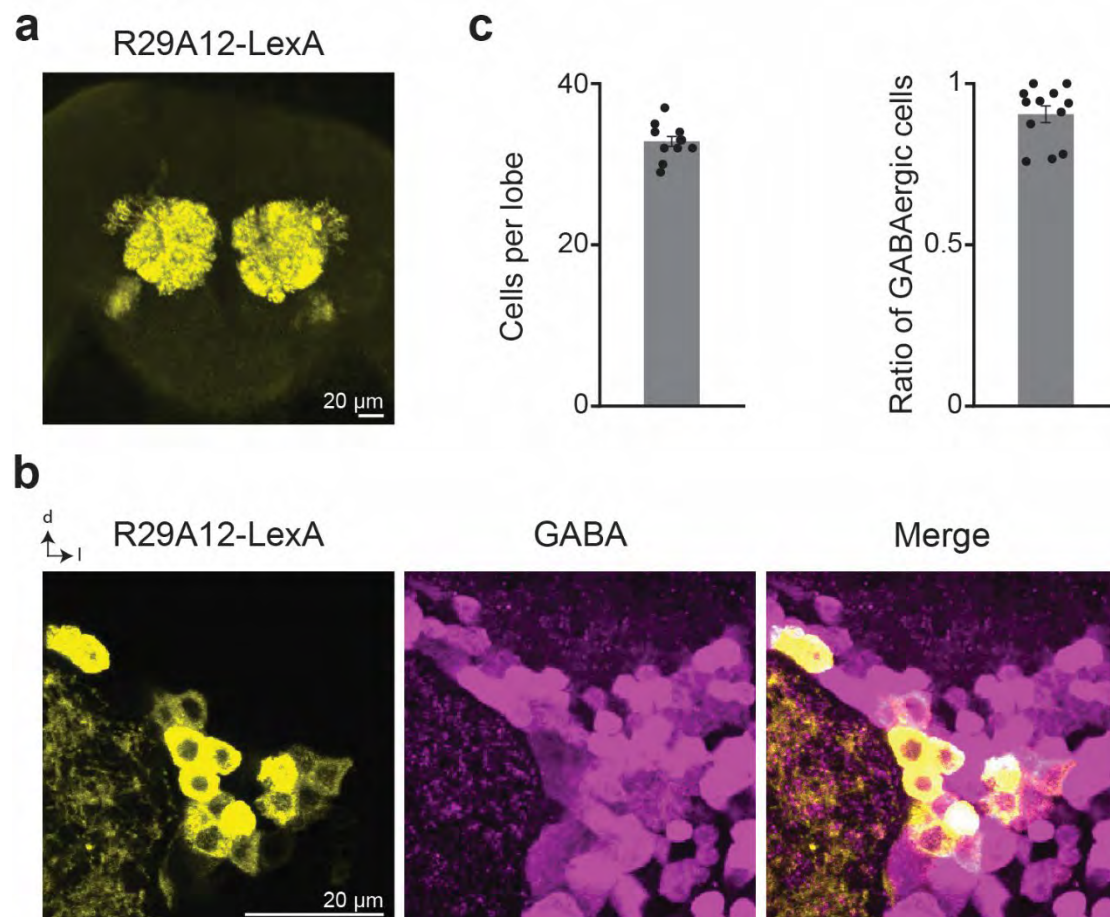


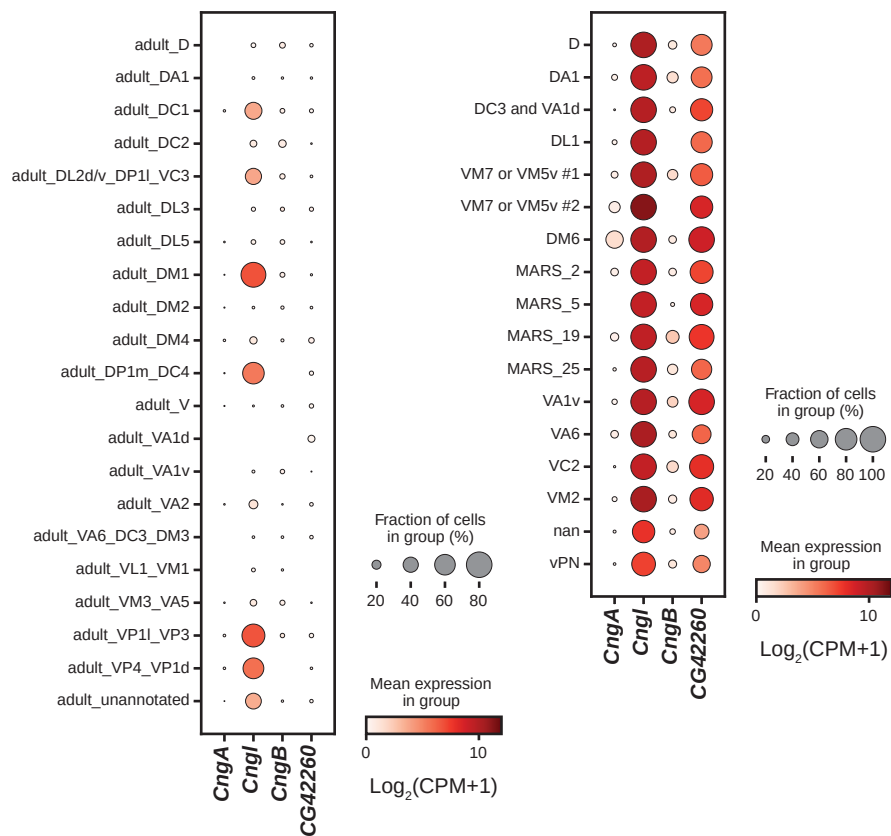
Figure S2: R29A12-LexA drives strong and specific expression in GABAergic iLNs of the lateral cluster.

A. Maximum intensity projection (131 sections, 1 μ m) through the brain of a fly expressing LexAop-rCD2::RFP (yellow) under R29A12-LexA control. R29A12-LexA is strongly expressed in the AL, specifically in cells of the dorsolateral cluster. No projections from/to the AL are visible. Expression outside the AL is largely limited to the antennal mechanosensory and motor center.

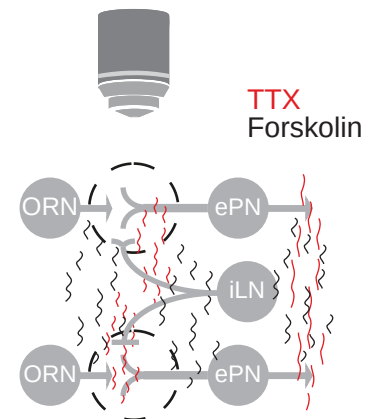
B. Maximum intensity projection (3 sections, 0.5 μ m) through the AL of a fly expressing LexAop-mCD8::GFP under R29A12-LexA control (left), co-stained with anti-GABA antibodies (middle). Most R29A12-LexA cells are GABAergic.

C. Quantification of the number of R29A12-LexA cells per lobe (left) and the ratio of GABAergic R29A12-LexA cells out of total R29A12-LexA cells per lobe (right). Error bars represent SEM. n=12 lobes.

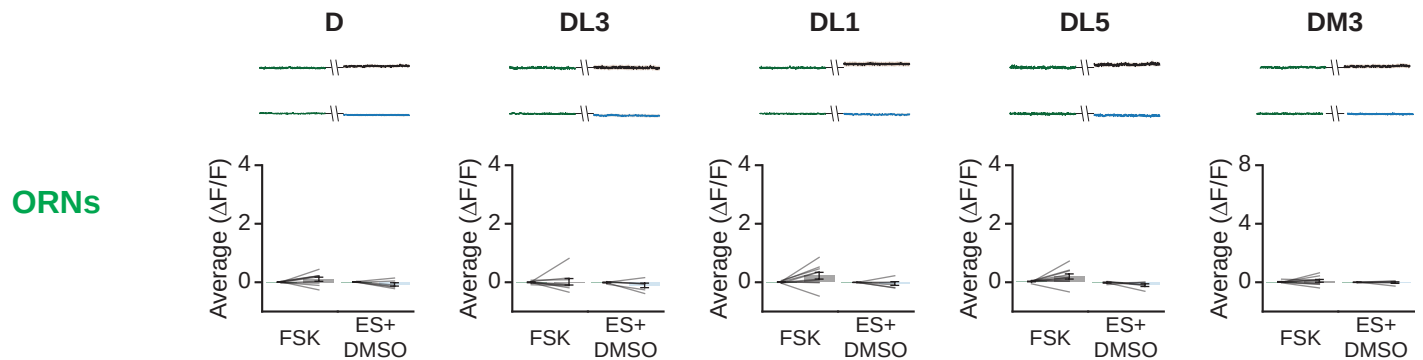
a



b



c



d

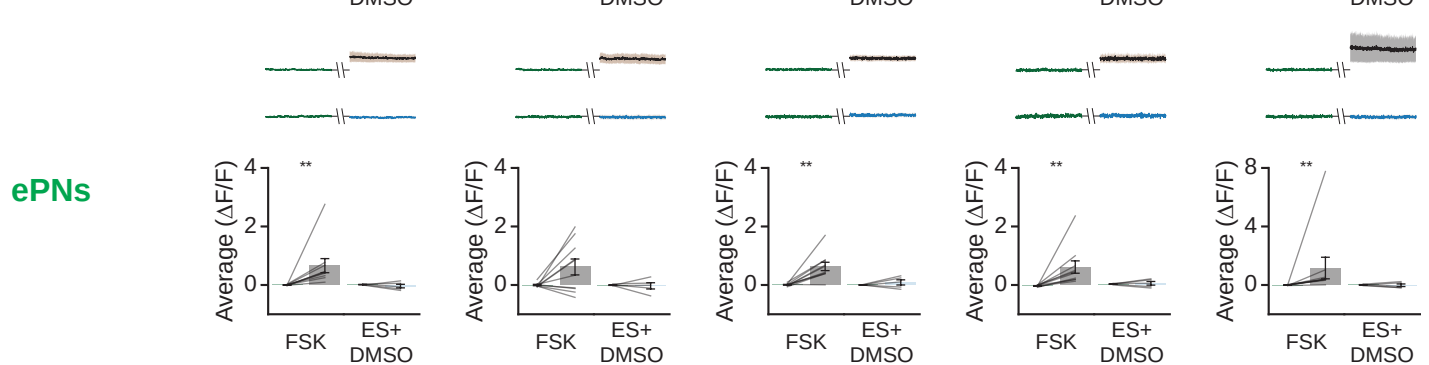
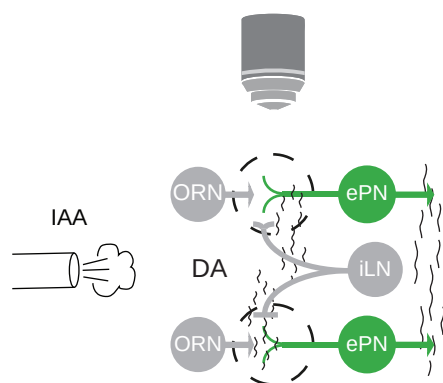


Figure S3: Forskolin elicits Ca^{2+} increase in ePNs.

A. CNG channel subunit expression in ORNs (left) and PN (right) from datasets published by McLaughlin et al.¹ and Xie et al.³, respectively. *CngL* and CG42260 are broadly and strongly expressed in ePNs. *CngL* is sparsely expressed in ORNs.

B. Experimental scheme. GCaMP7b was expressed in ORNs or ePNs, and AL signals were recorded before and after application of 40 μM forskolin (FSK), in the presence of TTX.

C, D. *Top panel*, $\Delta F/F$ of GCaMP7b signal recorded from ORN (C) and ePN (D) glomeruli (as indicated) before (green) and after bath application of 40 μM forskolin (black). ES with DMSO (blue) served as control. Data are mean (solid line) $\pm$ SEM (shaded area). *Bottom panel*, the average $\Delta F/F$ (mean $\pm$ SEM) of the traces presented above. **C.** Forskolin application had no effect on ORNs. n for forskolin: D, 9; DL3, 9; DL1, 10; DL5, 10; DM3, 10. n for ES with DMSO = 6. **D.** Forskolin induces Ca^{2+} increase in all ePN glomeruli except DL3. n for Forskolin = 10. n for ES with DMSO = 5. ** $p < 0.01$. For detailed statistical analysis, see Table S1.

a**b**

— Before
— After 100 μ M DA

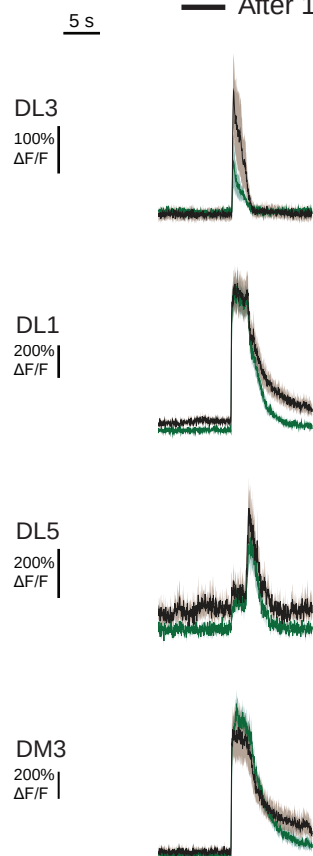
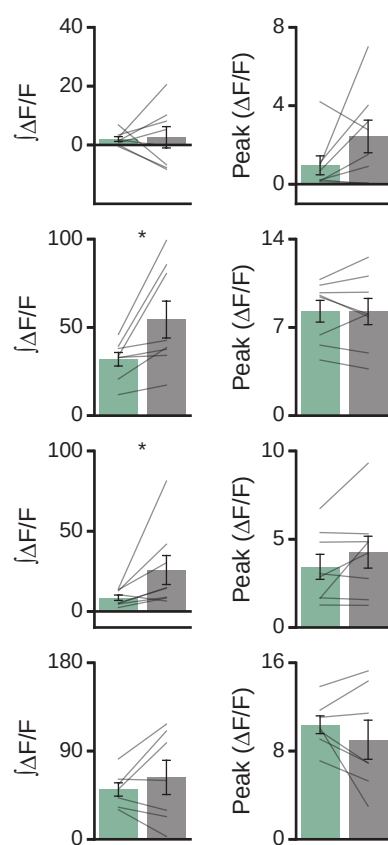
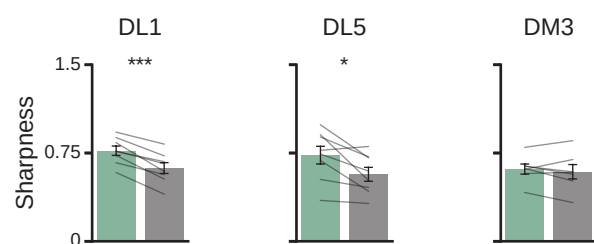
**c****d**

Figure S4: Application of 100 μ M DA increases DL1 and DL5 responses to IAA.

A. Experimental scheme. GCaMP6f was expressed in GH146 ePNs (green). AL responses to 2-second-long IAA pulses were recorded before and after bath application of 100 μ M DA.

B. $\Delta F/F$ of GCaMP6f signal recorded from GH146-Gal4 ePN glomeruli (as indicated) in response to 2 seconds IAA pulses (horizontal bars), before (green) and after (black) bath application 100 μ M DA. Data are mean (solid line) $\pm$ SEM (shaded area).

C. The integral of the response (left) and peak response (right) of the traces presented in B (mean $\pm$ SEM). Application of 100 μ M DA increases IAA response of DL1 and DL5 ePNs. n for D, DL3, DL1 and DL5: 8, n for DM3: 7. * $p < 0.05$. For detailed statistical analysis, see Table S1.

D. The temporal sharpness of the traces presented in B. Application of 100 μ M DA decreases the temporal sharpness of DL1 and DL5 ePNs. n as described in C. * $p < 0.05$, *** $p < 0.001$. For detailed statistical analysis, see Table S1.

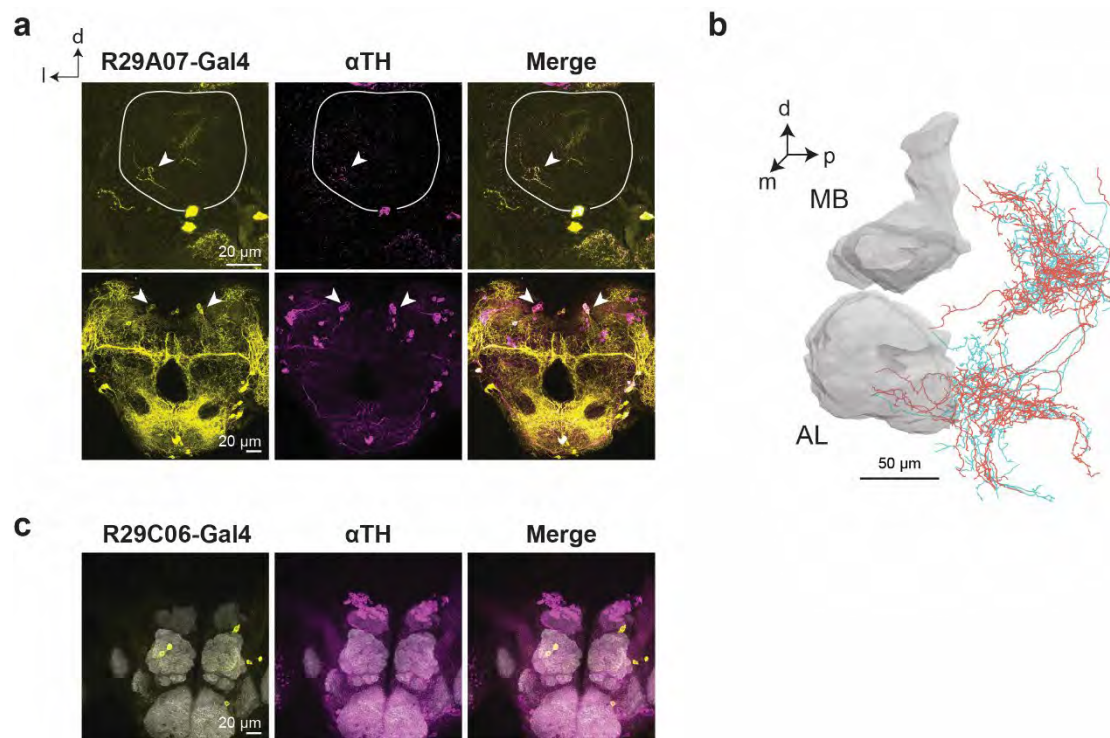


Figure S5: R29C07-Gal4 and R29C06 expression in the AL

A. Maximum intensity projections through the AL (top, 16 confocal sections, 0.4 μm) and the posterior brain (bottom, 146 confocal sections, 0.4 μm) of flies expressing UAS-mCD8::GFP under the *ple*-derived R29A07-Gal4 control (left), co-stained with anti-TH antibody (middle), showing the AL region (top panel, encircled in white) and the posterior side of the brain (bottom panel). Colocalization of GFP and TH signals is again visible in the ventral part of the AL (white arrow, top), as well as in the PPM1/2 clusters (white arrows, bottom).

B. Side view of skeletons of two PPM1201 neurons, alongside the volumes of the mushroom body (MB) and the antennal lobe (AL), taken from the Flywire connectome^{4,5}. PPM1201 neurons innervate the right AL from its posterior side, showing innervations largely limited to the ventral region of the AL.

C. Maximum intensity projections (60 confocal sections, 0.5 μm) through the ALs of a fly expressing UAS-mCD8::GFP under the control of the *ple* derived R29C06-Gal4 driver (left), co-stained with anti-TH antibodies (middle). nc82 was used to stain neuropils (grey). None of the AL cells labeled by the R29C06-Gal4 driver show anti-TH signal.

a

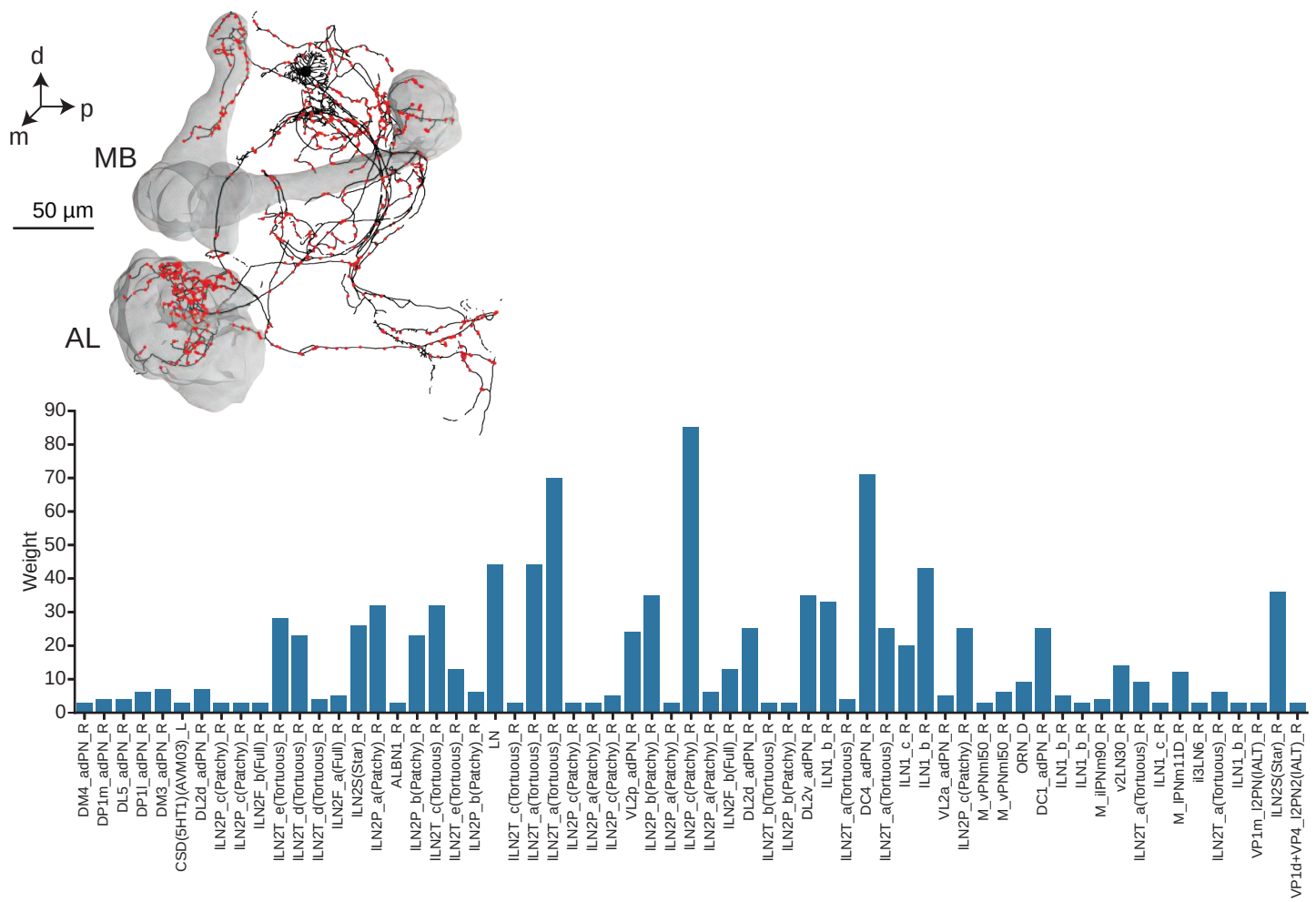
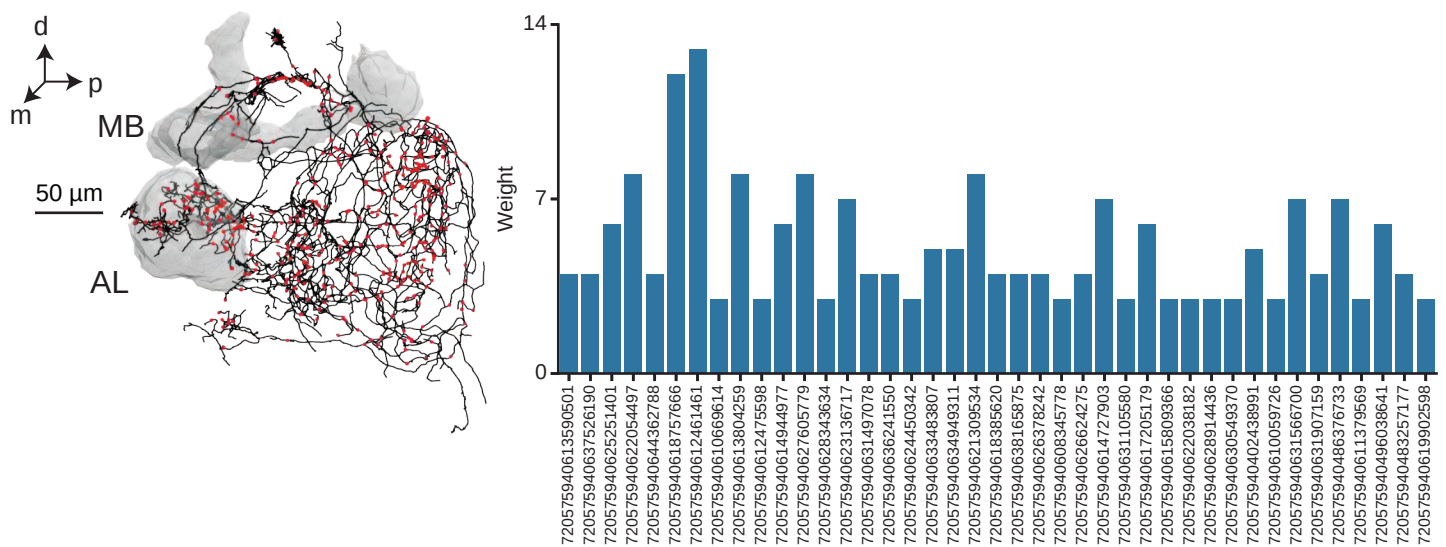
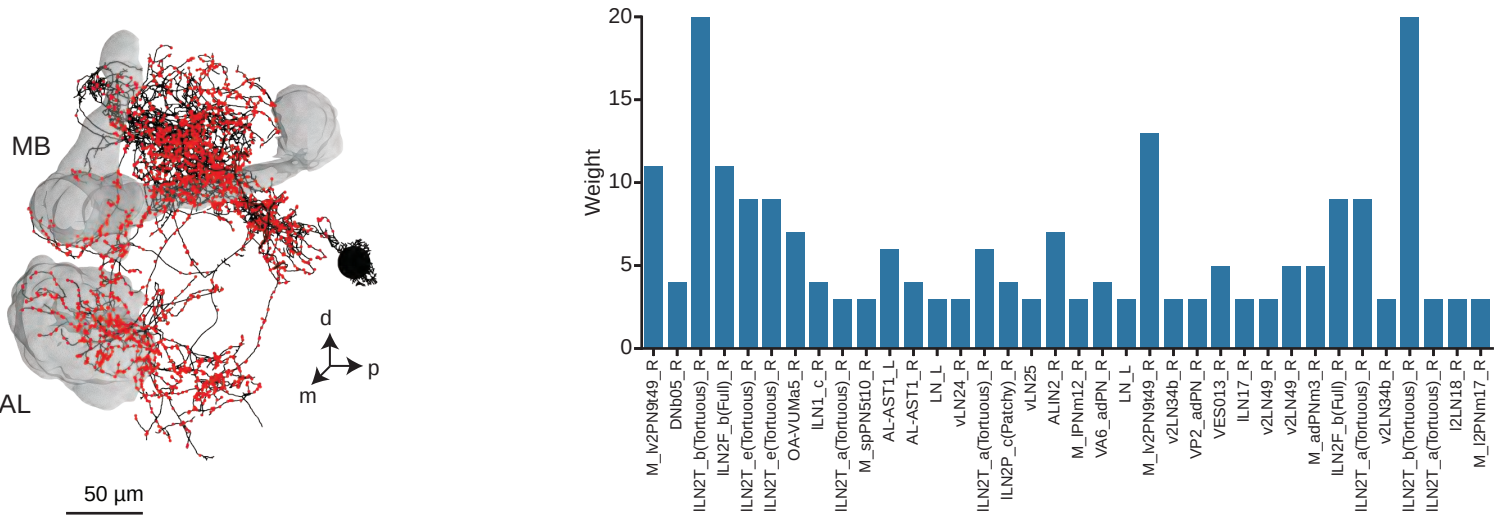
**b**

Figure S6: SIFa presynaptic terminals in the AL

A, B. *Top* (A), and *left* (B), side view of a skeleton of a SIFa neuron (black) taken from the hemibrain⁶ (A) and Flywire^{4,5} (B) connectomes showing its presynaptic terminals (red) and the volumes of the antennal lobe (AL) and mushroom body (MB). *Bottom* (A) and *right* (B), weights of synaptic outputs from the four SIFa neurons to AL neurons, taken from the hemibrain⁶ (A) and Flywire^{4,5} (B) connectomes.

a



b

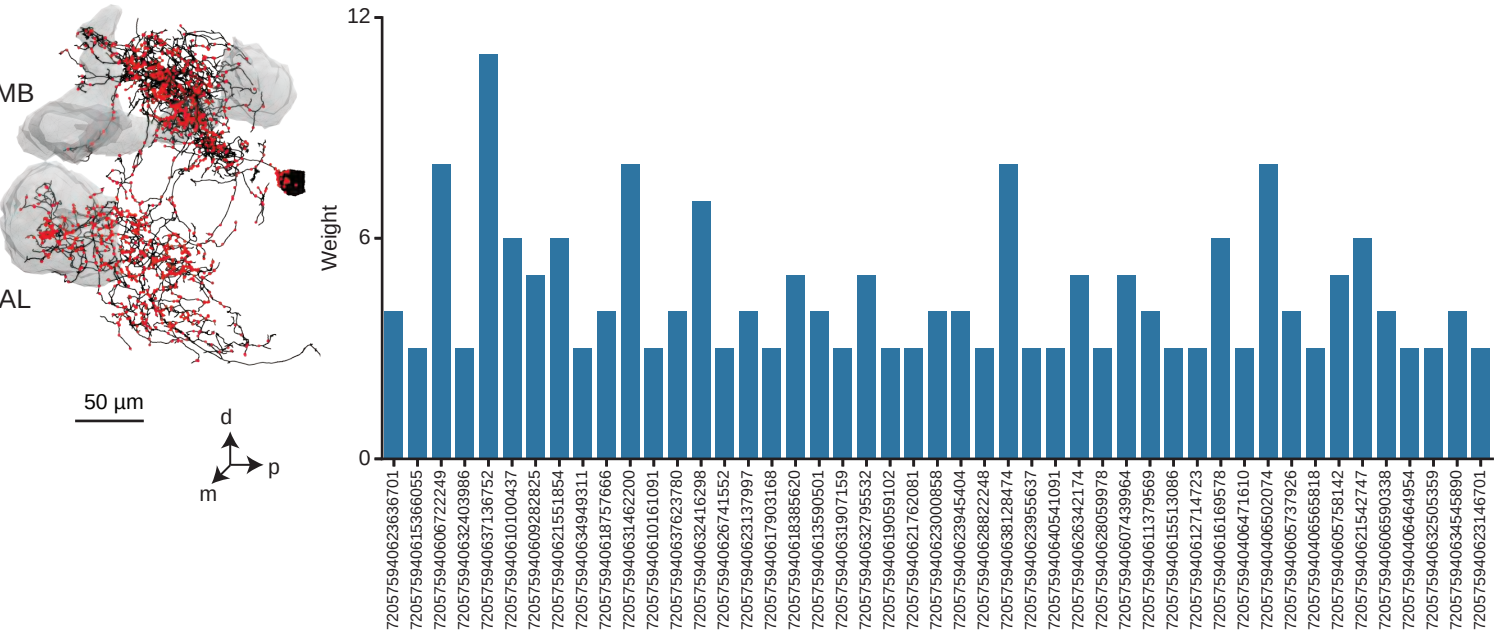


Figure S7: DNp32 presynaptic terminals in the AL

A, B. *Left*, side view of a skeleton of a DNp32 neuron (black) taken from the hemibrain⁶ (A) and Flywire^{4,5} (B) connectomes showing its presynaptic terminals (red) and the volumes of the antennal lobe (AL) and mushroom body (MB). *Right*, weights of synaptic outputs from the DNp32 neurons to AL neurons, taken from the hemibrain⁶ (A, a single DNp32 neuron) and Flywire^{4,5} (B, two DNp32 neurons) connectomes.

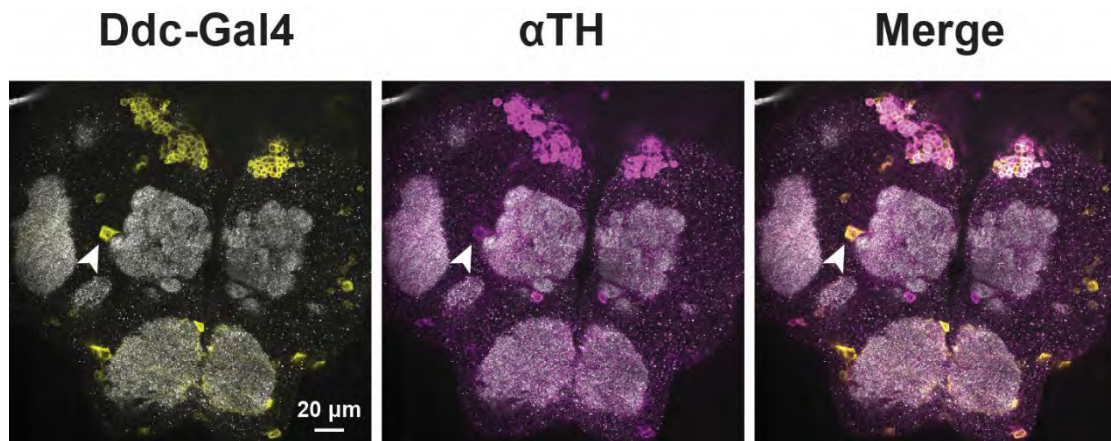


Figure S8: *DDC*-Gal4 expression in the AL

Maximum intensity projections (3 confocal sections, 0.5 μm) through the ALs of a fly expressing UAS-mCD8::GFP under *Ddc*-Gal4 control (left), co-stained with anti-TH antibodies (middle). nc82 staining (grey) is also shown in all images. *Ddc*-Gal4 labels TH⁺ AL-adjacent cell with similar characteristics to the CSD neuron (white arrows).

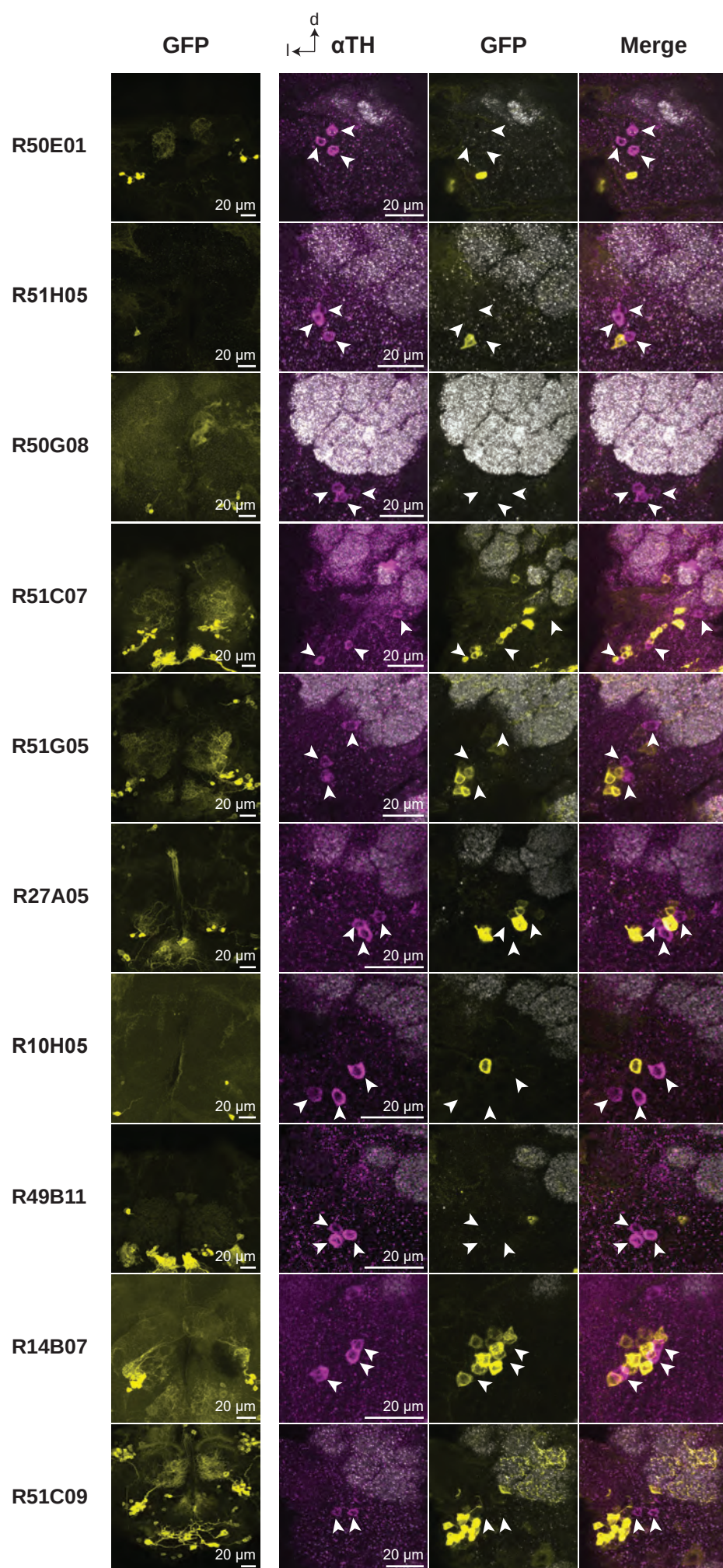


Figure S9: Screen of Gal4 drivers labeling ventral AL cells.

Left, maximum intensity projections (confocal sections, top to bottom: 71, 88, 76, 109, 98, 78, 84, 71, 100, 96; 0.5 μ m) through the brains of flies expressing UAS-mCD8::GFP under the control of Gal4 drivers labeling ventral AL neurons (as indicated). *Right*, maximum intensity projections (confocal sections, top to bottom: 6, 10, 6, 5, 7, 3, 4, 3, 3, 9, 9; 0.5 μ m) at larger magnification of the ventral AL cell cluster of the brains presented on the left, showing anti-TH (left) and GFP (middle) staining. nc82 staining (grey) is also shown. TH⁺ somata are labeled by white arrows. No anti-TH signal is visible in any of the ventral AL cells labeled by these driver lines.

Table S1: Statistical analysis related to Figures 2, 3, 4, 8, 9, S4, and S5

Table S1: Statistical analysis. Related to Figures 2,3,4,8,9,S4,S5

Figure	Data	Statistical method	Comparison	p-value (exact or approximate) or adjusted p-value (for multiple comparison tests)	Significance
Figure 2C	Response integral glomerulus D ORNs	Welch's t-test	1. DA application (n=7) 2. ES application (n=7)	0.00158657	**
	Response integral glomerulus DL3 ORNs	Student's t-test	1. DA application (n=5) 2. ES application (n=5)	0.001038508	**
	Response integral glomerulus DL1 ORNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=7)	0.000207805	***
	Response integral glomerulus DL5 ORNs	Welch's t-test	1. DA application (n=7) 2. ES application (n=7)	0.000722871	***
	Response integral glomerulus DM3 ORNs	Student's t-test	1. DA application (n=5) 2. ES application (n=7)	2.29E-05	****
	Peak glomerulus D ORNs	Welch's t-test	1. DA application (n=7) 2. ES application (n=7)	0.003469584	**
	Peak glomerulus DL3 ORNs	Student's t-test	1. DA application (n=5) 2. ES application (n=5)	0.01231227	*
	Peak glomerulus DL1 ORNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=7)	0.000130875	***
	Peak glomerulus DL5 ORNs	Welch's t-test	1. DA application (n=7) 2. ES application (n=7)	0.001779422	**
	Peak glomerulus DM3 ORNs	Welch's t-test	1. DA application (n=5) 2. ES application (n=7)	0.002031344	**
	Response integral glomerulus D PNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=4)	0.000211136	***
	Response integral glomerulus DL3 PNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=4)	2.52E-04	***
	Response integral glomerulus DL1 PNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=4)	3.96E-05	****
	Response integral glomerulus DL5 PNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.000283166	***
	Response integral glomerulus DM3 PNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=4)	0.000519267	***
	Peak glomerulus D PNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=4)	0.000522763	***
	Peak glomerulus DL3 PNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=4)	0.001110118	**
	Peak glomerulus DL1 PNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	8.59E-05	****
	Peak glomerulus DL5 PNs	Mann-Whitney U test	1. DA application (n=6) 2. ES application (n=4)	1.90E-02	*
	Peak glomerulus DM3 PNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=4)	0.001011037	**
	Response integral iLNs	Welch's t-test	1. DA application (n=6) 2. ES application (n=6)	0.001277455	**
	Peak iLNs	Mann-Whitney U test	1. DA application (n=6) 2. ES application (n=6)	0.002164502	**
	Response integral glomerulus D ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.681777376	ns
	Response integral glomerulus DL3 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.081885367	ns
	Response integral glomerulus DL1 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.558211035	ns
	Response integral glomerulus DL5 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.824133872	ns
	Response integral glomerulus DM3 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.855524813	ns
	Peak glomerulus D ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.536745378	ns
	Peak glomerulus DL3 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.247991219	ns
	Peak glomerulus DL1 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.836023614	ns
	Peak glomerulus DL5 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.922815475	ns
	Peak glomerulus DM3 ORNs	Student's t-test	1. DA application (n=6) 2. ES application (n=4)	0.529397135	ns

Figure 2E	Response integral glomerulus D PNs	Welch's t-test	1. DA application (n=12) 2. ES application (n=6)	0.000106819	***
	Response integral glomerulus DL3 PNs	Mann-Whitney U test	1. DA application (n=12) 2. ES application (n=6)	0.000754148	***
	Response integral glomerulus DL1 PNs	Mann-Whitney U test	1. DA application (n=12) 2. ES application (n=6)	0.000754148	***
	Response integral glomerulus DL5 PNs	Mann-Whitney U test	1. DA application (n=12) 2. ES application (n=6)	0.013466925	*
	Response integral glomerulus DM3 PNs	Welch's t-test	1. DA application (n=12) 2. ES application (n=6)	0.001736861	**
	Peak glomerulus D PNs	Welch's t-test	1. DA application (n=12) 2. ES application (n=6)	7.69E-06	****
	Peak glomerulus DL3 PNs	Mann-Whitney U test	1. DA application (n=12) 2. ES application (n=6)	0.004740358	**
	Peak glomerulus DL1 PNs	Mann-Whitney U test	1. DA application (n=12) 2. ES application (n=6)	0.003232062	**
	Peak glomerulus DL5 PNs	Mann-Whitney U test	1. DA application (n=12) 2. ES application (n=6)	0.003232062	**
	Peak glomerulus DM3 PNs	Student's t-test	1. DA application (n=12) 2. ES application (n=6)	0.005102398	**
	Response integral iLNs	Student's t-test	1. DA application (n=5) 2. ES application (n=4)	0.70127193	ns
	Peak iLNs	Student's t-test	1. DA application (n=5) 2. ES application (n=4)	0.065354089	ns
Figure 3C	Response integral glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	7.44E-01	ns
	Response integral glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	1.24E-01	ns
	Response integral glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	0.801986892	ns
	Response integral glomerulus DM3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=6) 2. After ES application (n=6)	0.182166694	ns
	Peak glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	5.70E-01	ns
	Peak glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	3.79E-01	ns
	Peak glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	0.030359752	*
	Peak glomerulus DM3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=6) 2. After ES application (n=6)	0.09375	ns
	Response integral glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.0234375	*
	Response integral glomerulus DL1 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	1.17E-02	*
	Response integral glomerulus DL5 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	2.34E-02	*
	Response integral glomerulus DM3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.08203125	ns
	Peak glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.0234375	*
	Peak glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	5.80E-01	ns
	Peak glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	1.38E-02	*
	Peak glomerulus DM3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.827082751	ns
	Response integral glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.203613281	ns
Figure 3E	Response integral glomerulus DL1 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.431640625	ns
	Response integral glomerulus DL5 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.203613281	ns
	Response integral glomerulus DM3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.569335938	ns
	Peak glomerulus DL3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.255704048	ns
	Peak glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.081629141	ns
	Peak glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.720244446	ns
	Peak glomerulus DM3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.971408137	ns
	Response integral glomerulus DL3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12)		

	Response integral glomerulus DL3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	2. After 1 mM DA application (n=12)	0.049597566	*
	Response integral glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	6.55E-06	****
	Response integral glomerulus DL5 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.001953125	**
	Response integral glomerulus DM3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.006835938	**
	Peak glomerulus DL3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.255704048	ns
	Peak glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.872988639	ns
	Peak glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.720244446	ns
	Peak glomerulus DM3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.971408137	ns
Figure 3G	Response integral glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.0390625	*
	Response integral glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=11) 2. After ES application (n=11)	0.277231948	ns
	Response integral glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.359375	ns
	Response integral glomerulus DM3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.2109375	ns
	Peak glomerulus DL3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.589354931	ns
	Peak glomerulus DL1 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=11) 2. After ES application (n=11)	0.764648438	ns
	Peak glomerulus DL5 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.177271893	ns
	Peak glomerulus DM3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.216173654	ns
	Response integral glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=10) 2. After 1 mM DA application (n=10)	0.921875	ns
	Response integral glomerulus DL1 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=13) 2. After 1 mM DA application (n=13)	0.026855469	*
	Response integral glomerulus DL5 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.359375	ns
	Response integral glomerulus DM3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=8) 2. After 1 mM DA application (n=8)	0.25	ns
	Peak glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=10) 2. After 1 mM DA application (n=10)	0.76953125	ns
	Peak glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=13) 2. After 1 mM DA application (n=13)	0.233077774	ns
	Peak glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.177271893	ns
	Peak glomerulus DM3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=8) 2. After 1 mM DA application (n=8)	0.329711737	ns
Figure 3H	IAA DL1 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	0.714373037	ns
	IAA DL5 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=9) 2. After ES application (n=9)	0.611968994	ns
	IAA DM3 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=6) 2. After ES application (n=6)	0.307795033	ns
	IAA DL1 Sharpness	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.005859375	**
	IAA DL5 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.042605136	*
	IAA DM3 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.029340669	*
	3-Oct DL1 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.414080776	ns
	3-Oct DL5 Sharpness	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.301269531	ns
	3-Oct DM3 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=12) 2. After ES application (n=12)	0.298625288	ns
	3-Oct DL1 Sharpness	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.000976563	***
	3-Oct DL5 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	0.000993897	***
	3-Oct DM3 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=12) 2. After 1 mM DA application (n=12)	3.37E-06	****
	MCH DL1 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=11)		

	MCH DL1 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	2. After ES application (n=11)	0.125616176	ns
	MCH DL5 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.087807997	ns
	MCH DM3 Sharpness	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before ES application (n=10) 2. After ES application (n=10)	0.431640625	ns
	MCH DL1 Sharpness	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=13) 2. After 1 mM DA application (n=13)	0.009277344	**
	MCH DL5 Sharpness	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=9) 2. After 1 mM DA application (n=9)	0.359375	ns
	MCH DM3 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 1 mM DA application (n=8) 2. After 1 mM DA application (n=8)	0.217230827	ns
Figure 4F	Response integral glomerulus D ORNs	Student's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	3.06E-05	****
	Response integral glomerulus DL3 ORNs	Student's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.000162425	***
	Response integral glomerulus DL1 ORNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.013897355	*
	Response integral glomerulus DL5 ORNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.004979497	**
	Response integral glomerulus DM3 ORNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.006904671	**
	Peak glomerulus D ORNs	Student's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	5.38E-05	****
	Peak glomerulus DL3 ORNs	Student's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.001395982	**
	Peak glomerulus DL1 ORNs	Mann-Whitney U test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.004329004	**
	Peak glomerulus DL5 ORNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.010798133	*
	Peak glomerulus DM3 ORNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=5)	0.003477272	**
Figure 4G	Response integral glomerulus D ePNs	Welch's t-test	1. ES application (n=7) 2. 100 uM nicotine application (n=8)	3.90E-03	**
	Response integral glomerulus DL3 ePNs	Welch's t-test	1. ES application (n=7) 2. 100 uM nicotine application (n=8)	0.067909555	ns
	Response integral glomerulus DL1 ePNs	Mann-Whitney U test	1. ES application (n=7) 2. 100 uM nicotine application (n=8)	0.0003108	***
	Response integral glomerulus DL5 ePNs	Mann-Whitney U test	1. ES application (n=7) 2. 100 uM nicotine application (n=7)	0.000582751	***
	Response integral glomerulus DM3 ePNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=8)	5.68E-05	****
	Peak glomerulus D ePNs	Welch's t-test	1. ES application (n=7) 2. 100 uM nicotine application (n=8)	1.14E-03	**
	Peak glomerulus DL3 ePNs	Student's t-test	1. ES application (n=7) 2. 100 uM nicotine application (n=8)	0.006675007	**
	Peak glomerulus DL1 ePNs	Mann-Whitney U test	1. ES application (n=7) 2. 100 uM nicotine application (n=8)	0.0003108	***
	Peak glomerulus DL5 ePNs	Mann-Whitney U test	1. ES application (n=7) 2. 100 uM nicotine application (n=7)	0.000582751	***
	Peak glomerulus DM3 ePNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=8)	3.03E-05	****
Figure 4K	Response integral iLNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=4)	0.00036644	***
	Peak iLNs	Welch's t-test	1. ES application (n=6) 2. 100 uM nicotine application (n=4)	0.001251533	**
Figure 8B	Response integral	Kruskal-Wallis test followed by Dunn's test post-hoc	1. undriven UAS-P2X2 (II) GRAB response to ATP stimulation (n=11) 2. TH-Gal4>UAS P2X2 (II) GRAB response to ATP stimulation (n=10)	0.007793386	**
			1. undriven UAS-P2X2 (II) GRAB response to ATP stimulation (n=11) 2. VMAT-Gal4>UAS P2X2 (II) GRAB response to ATP stimulation (n=6)	3.57E-01	ns
	Peaks	Kruskal-Wallis test followed by Dunn's test post-hoc	1. undriven UAS-P2X2 (II) GRAB response to ATP stimulation (n=11) 2. TH-Gal4>UAS P2X2 (II) GRAB response to ATP stimulation (n=10)	0.004660481	**
			1. undriven UAS-P2X2 (II) GRAB response to ATP stimulation (n=11) 2. VMAT-Gal4>UAS P2X2 (II) GRAB response to ATP stimulation (n=6)	1.86E-01	ns
Figure 8C	Response integral	Student's t-test	1. undriven UAS-P2X2 (III) GRAB response to ATP stimulation (n=6) 2. OK371-Gal4>UAS P2X2 (II) GRAB response to ATP stimulation (n=6)	0.010697842	*
	Peak	Welch's t-test	1. undriven UAS-P2X2 (III) GRAB response to ATP stimulation (n=6) 2. OK371-Gal4>UAS P2X2 (II) GRAB response to ATP stimulation (n=6)	0.026443943	*
	Response integral glomerulus D IAA	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.330586462	ns
	Response integral glomerulus D 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.330586462	ns

Figure 9B	Response integral glomerulus D MCH	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.330586462	ns
	Peak glomerulus D IAA	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.13029869	ns
	Peak glomerulus D 3-Oct	Welch's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.13029869	ns
	Peak glomerulus D MCH	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.13029869	ns
Figure 9C	Response integral glomerulus DL3 IAA	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=9) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.35567361	ns
	Response integral glomerulus DL3 3-Oct	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=9) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.35567361	ns
	Response integral glomerulus DL3 MCH	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=9) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.35567361	ns
	Peak glomerulus DL3 IAA	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=9) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.511879927	ns
	Peak glomerulus DL3 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=9) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.511879927	ns
	Peak glomerulus DL3 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=9) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.511879927	ns
Figure 9D	Response integral glomerulus DL1 IAA	Welch's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.017901158	*
	Response integral glomerulus DL1 3-Oct	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.456844148	ns
	Response integral glomerulus DL1 MCH	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.366111187	ns
	Peak glomerulus DL1 IAA	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.485691751	ns
	Peak glomerulus DL1 3-Oct	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.786514056	ns
	Peak glomerulus DL1 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.485691751	ns
Figure 9E	Response integral glomerulus DL5 IAA	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=11) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.436274929	ns
	Response integral glomerulus DL5 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=11) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.436274929	ns
	Response integral glomerulus DL5 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=11) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.436274929	ns
	Peak glomerulus DL5 IAA	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=11) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.876269664	ns
	Peak glomerulus DL5 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=11) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.876269664	ns
	Peak glomerulus DL5 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=11) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.638735708	ns
Figure 9F	Response integral glomerulus DM3 IAA	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.933688514	ns
	Response integral glomerulus DM3 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.933688514	ns
	Response integral glomerulus DM3 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.933688514	ns
	Peak glomerulus DM3 IAA	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.52497275	ns
	Peak glomerulus DM3 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.52497275	ns
	Peak glomerulus DM3 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.52497275	ns
Figure 9G	Sharpness glomerulus DL1 IAA	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.006490675	**
	Sharpness glomerulus DL1 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.212719818	ns
	Sharpness glomerulus DL1 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=13) 2. OK371-Gal4>UAS-TH-G-miRNA (n=16)	0.614044703	ns
	Sharpness glomerulus DM3 IAA	Student's t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.761307278	ns
	Sharpness glomerulus DM3 3-Oct	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.381458978	ns
	Sharpness glomerulus DM3 MCH	Mann-Whitney U test adjusted by Benjamini-Hochberg False Discovery Rate	1. undriven TH-G-miRNA (n=10) 2. OK371-Gal4>UAS-TH-G-miRNA (n=15)	0.761307278	ns
	Average glomerulus D ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=6) 2. After DMSO application (n=6)	0.25	ns
	Average glomerulus DL3 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=6) 2. After DMSO application (n=6)	0.4375	ns
	Average glomerulus DL1 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=6)		

Figure S3C	Average glomerulus DL1 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	2. After DMSO application (n=6)	0.5625	ns
	Average glomerulus DL5 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=6) 2. After DMSO application (n=6)	0.15625	ns
	Average glomerulus DM3 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=6) 2. After DMSO application (n=6)	0.84375	ns
	Average glomerulus D ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=9) 2. After 40 uM Forskolin application (n=9)	0.25	ns
	Average glomerulus DL3 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=9) 2. After 40 uM Forskolin application (n=9)	0.49609375	ns
	Average glomerulus DL1 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.2109375	ns
	Average glomerulus DL5 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.12890625	ns
	Average glomerulus DM3 ORNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.84375	ns
Figure S3D	Average glomerulus D	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=5) 2. After DMSO application (n=5)	0.625	ns
	Average glomerulus DL3	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=5) 2. After DMSO application (n=5)	1	ns
	Average glomerulus DL1	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=5) 2. After DMSO application (n=5)	0.4375	ns
	Average glomerulus DL5	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=5) 2. After DMSO application (n=5)	0.625	ns
	Average glomerulus DM3	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before DMSO application (n=5) 2. After DMSO application (n=5)	1	ns
	Average glomerulus D	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.00390625	**
	Average glomerulus DL3	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.2109375	ns
	Average glomerulus DL1	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.0078125	**
	Average glomerulus DL5	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.00390625	**
	Average glomerulus DM3	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 40 uM Forskolin application (n=10) 2. After 40 uM Forskolin application (n=10)	0.00390625	**
Figure S5C	Response integral glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	0.9453125	ns
	Response integral glomerulus DL1 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	1.17E-02	*
	Response integral glomerulus DL5 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	2.34E-02	*
	Response integral glomerulus DM3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=7) 2. After 100 uM DA application (n=7)	0.578125	ns
	Peak glomerulus DL3 PNs	Wilcoxon signed-rank test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	0.29296875	ns
	Peak glomerulus DL1 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	0.959192759	ns
	Peak glomerulus DL5 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	0.129159057	ns
	Peak glomerulus DM3 PNs	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=7) 2. After 100 uM DA application (n=7)	0.461507745	ns
Figure S5D	DL1 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	0.000510088	***
	DL5 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=8) 2. After 100 uM DA application (n=8)	0.041684054	*
	DM3 Sharpness	Paired t-test adjusted by Benjamini-Hochberg False Discovery Rate	1. Before 100 uM DA application (n=7) 2. After 100 uM DA application (n=7)	0.449524594	ns

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