

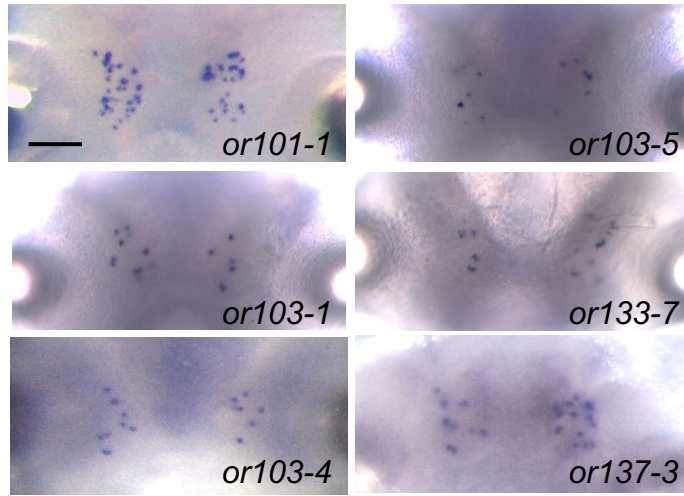


Figure S1. **Olfactory receptor genes are expressed in the olfactory epithelium.** Frontal views of 6-day-old larvae processed by whole mount in situ hybridization of selected olfactory receptor genes. Scale bar:100 $\mu$ m.

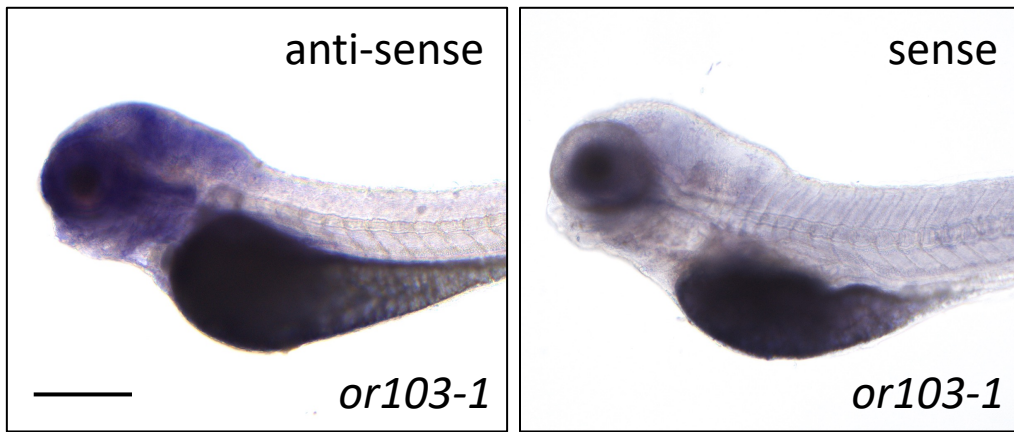


Figure S2. **Expression of OR transcript in the brain is specific.** Lateral views of 6-day-old larvae processed by whole mount in situ hybridization using anti-sense (left) or sense (right) probes for *or103-1*. Scale bar: 200 $\mu$ m

|                 | Olfactory epithelium | Head | Pharynx | Trunk | Pancreas |
|-----------------|----------------------|------|---------|-------|----------|
| <i>or101-1</i>  |                      |      |         |       |          |
| <i>or102-3</i>  |                      |      |         |       |          |
| <i>or103-1</i>  |                      |      |         |       |          |
| <i>or103-5</i>  |                      |      |         |       |          |
| <i>or104-1</i>  |                      |      |         |       |          |
| <i>or104-2</i>  |                      |      |         |       |          |
| <i>or105-1</i>  |                      |      |         |       |          |
| <i>or106-1</i>  |                      |      |         |       |          |
| <i>or106-11</i> |                      |      |         |       |          |
| <i>or108-1</i>  |                      |      |         |       |          |
| <i>or109-9</i>  |                      |      |         |       |          |
| <i>or111-1</i>  |                      |      |         |       |          |

|                 | Olfactory epithelium | Head | Pharynx | Trunk | Pancreas |
|-----------------|----------------------|------|---------|-------|----------|
| <i>or111-5</i>  |                      |      |         |       |          |
| <i>or111-11</i> |                      |      |         |       |          |
| <i>or112-1</i>  |                      |      |         |       |          |
| <i>or115-1</i>  |                      |      |         |       |          |
| <i>or117-1</i>  |                      |      |         |       |          |
| <i>or120-1</i>  |                      |      |         |       |          |
| <i>or125-4</i>  |                      |      |         |       |          |
| <i>or126-1</i>  |                      |      |         |       |          |
| <i>or126-3</i>  |                      |      |         |       |          |
| <i>or126-4</i>  |                      |      |         |       |          |
| <i>or126-7</i>  |                      |      |         |       |          |
| <i>or128-1</i>  |                      |      |         |       |          |

|                 | Olfactory epithelium | Head | Pharynx | Trunk | Pancreas |
|-----------------|----------------------|------|---------|-------|----------|
| <i>or128-4</i>  |                      |      |         |       |          |
| <i>or128-5</i>  |                      |      |         |       |          |
| <i>or132-1</i>  |                      |      |         |       |          |
| <i>or132-4</i>  |                      |      |         |       |          |
| <i>or133-2</i>  |                      |      |         |       |          |
| <i>or133-4</i>  |                      |      |         |       |          |
| <i>or133-7</i>  |                      |      |         |       |          |
| <i>or133-10</i> |                      |      |         |       |          |
| <i>or135-1</i>  |                      |      |         |       |          |
| <i>or137-3</i>  |                      |      |         |       |          |
| <i>or103-4</i>  |                      |      |         |       |          |
| <i>or137-9</i>  |                      |      |         |       |          |

Table S1. **Summary table of olfactory receptor gene expression in the zebrafish larvae.** Summary of 36 olfactory receptor gene expression pattern in different tissues (olfactory epithelium, head, pharynx, trunk and pancreas) in 6-day-old zebrafish larvae. See Figure 1.

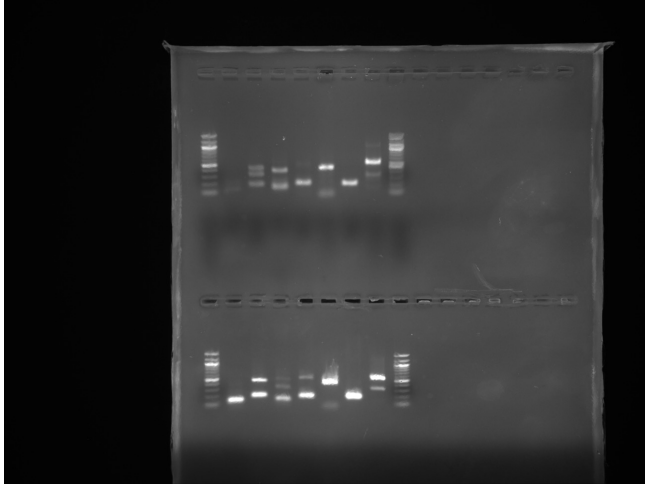
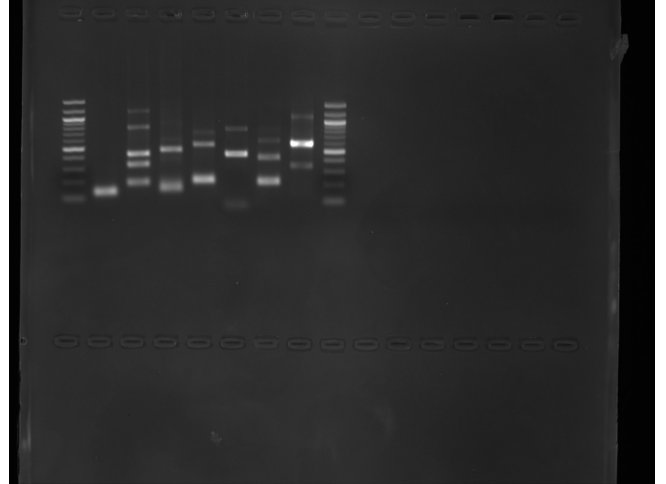
**A****B**

Figure S3. **Original images of the electrophoresis gel.** Bands from RT-PCR using cDNA from adult brains (A, top), whole larvae (A, bottom) or larvae with the OMP:GFP positive cells (olfactory epithelium) surgically removed (B) are shown.