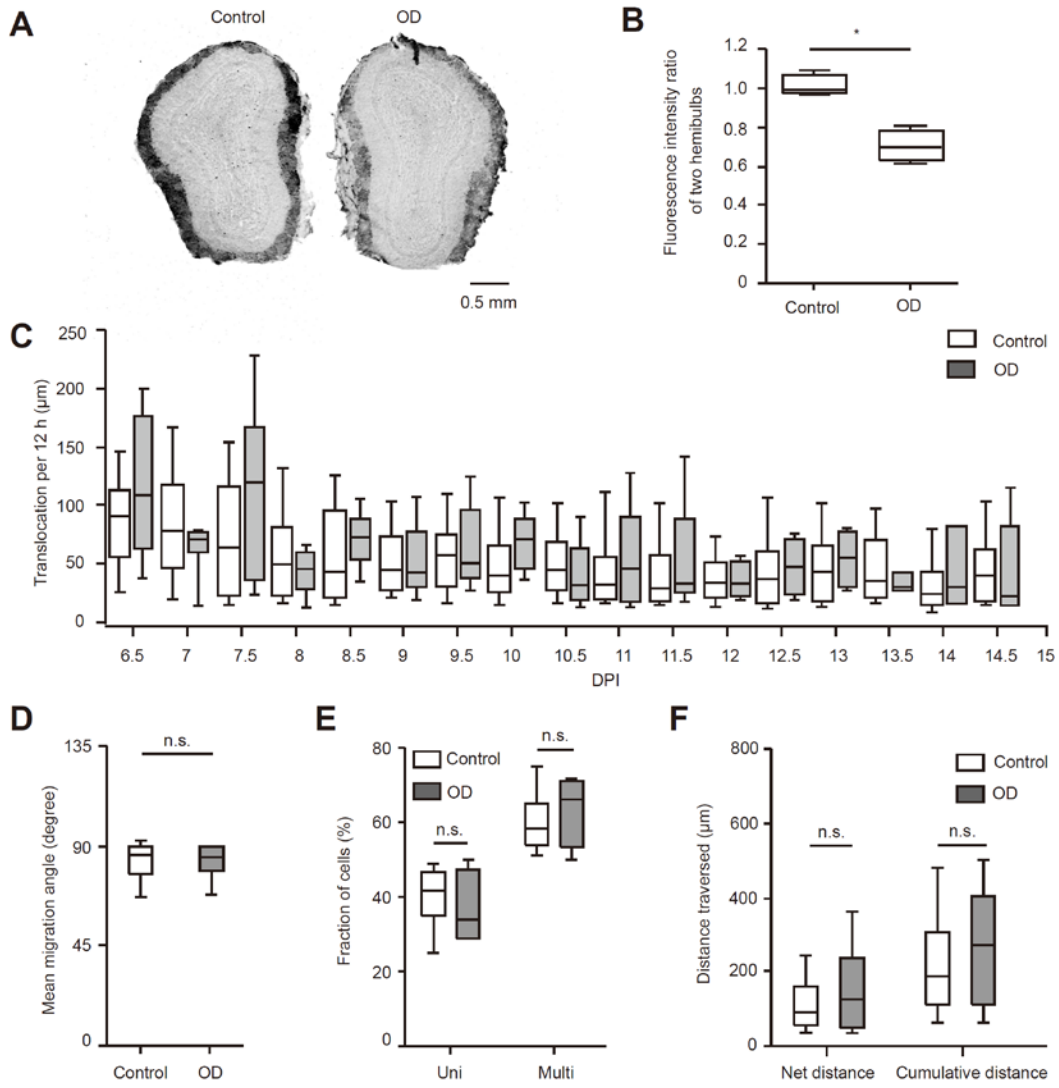
Supplementary Figure 4 The effect of naris closure on migration properties of adult-born JGNs in the glomerular layer



Supplementary Figure 4 The effect of naris closure on migration properties of adultborn JGNs in the glomerular layer.

(A, B) Tyrosine hydroxylase (TH) immunostaining of the OB of odor-deprived (OD) mice. **(A)** Sample coronal sections of the OB from unilaterally OD mice. Scale bar, 0.5 mm. **(B)** Box plot showing the ratio of mean immunofluorescence intensity in the GL of two olfactory hemibulbs for control and OD mice (see Supplementary methods for more detail). Note a significant reduction in TH expression in the OD side ($P<0.05$, Mann-Whitney test, n=4 for OD group and n=5 for control group). Data are shown as median ± interquartile range.

(C) Box plot showing migration speed (Translocation per 12 hours) of adult-born JGNs on different days in GL. Data were collected from 206 JGNs in 8 mice (3 mice from control side of OD mice, and 5 non-OD mice) for control group and 35 JGNs in 4 odor-deprived mice. No significant difference was found between control and deprived groups at any time point (DPI 6.5-14.5; Man-Whitney test, *P* ranged from

0.06 to 0.94). Here and below all values are shown as median ± interquartile range.
(D) Comparison of mean migration angles of JGNs belonging to control (n=206 cells, 8 mice) and deprived (n=35 cells, 4 mice) groups. No significant difference was found by Mann-Whitney test, $P = 0.95$.
(E) Box plot illustrating the fraction of uni- or multi-directional JGNs in control (n=8 mice) and OD groups (n=4 mice). No significant difference was found between the two groups by Mann-Whitney test, $P=0.6$ for either comparison.
(F) Comparison of net or cumulative migration distances of JGNs (n=25 cells, 4 mice for deprived group, n=234 cells, 8 mice for control group). No significant difference was found between the deprived and control groups by Mann-Whitney test, $P=0.1$ for net distance, and 0.2 for cumulative distance.