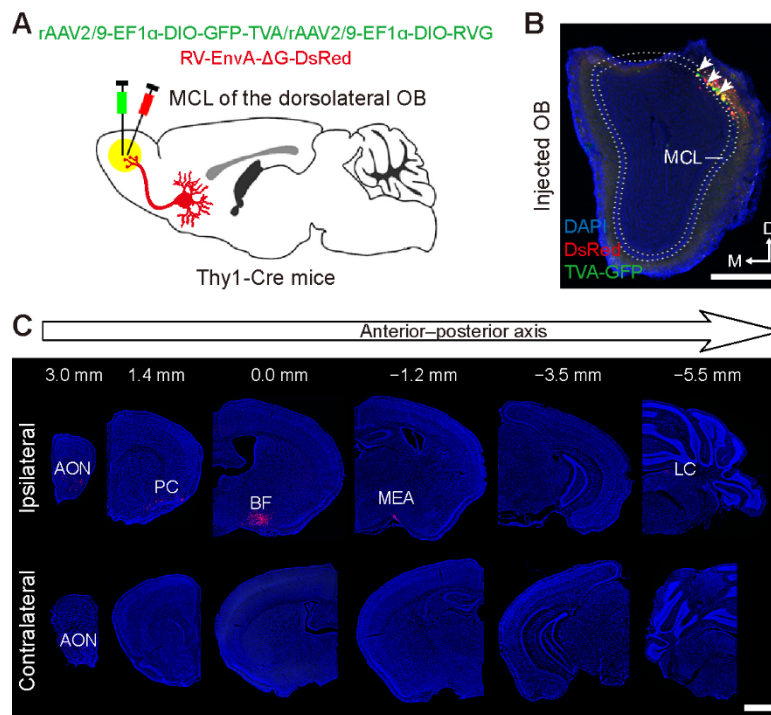
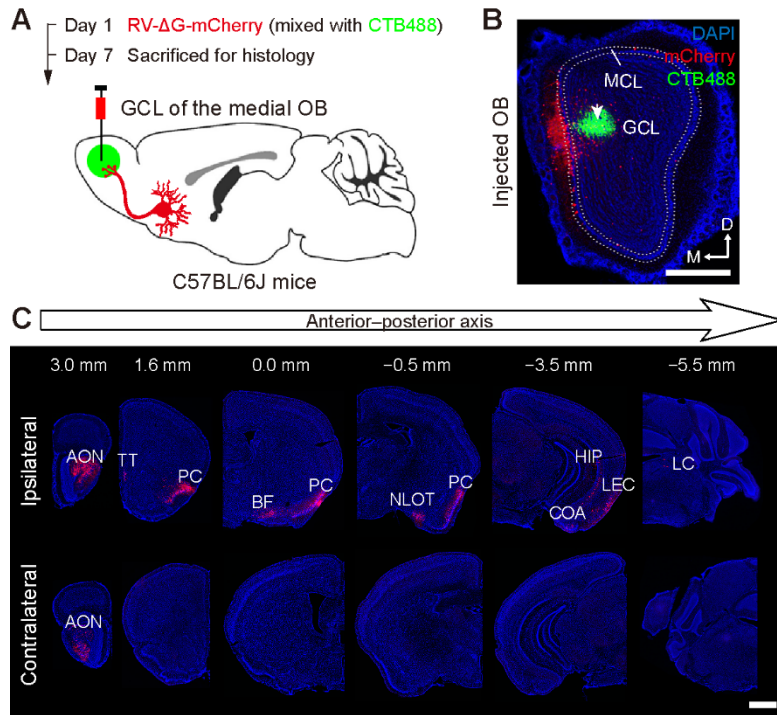


## Supplemental Information



**Supplementary Figure S1.** Retrograde tracing of monosynaptic input to the M/TCs of the dorsolateral OB. (A) Strategy for input tracing from the M/TCs using RV-based retrograde mono-synaptic tracing viruses. (B) Example image showing starter neurons (indicated by arrows) in the MCL of the dorsolateral OB. MCL, mitral cell layer. (C) Example images showing fluorescently labeled input neurons in major brain areas. AON, anterior olfactory nucleus; PC, piriform cortex; BF, basal forebrain; MEA, medial amygdalar nucleus; LC, locus coeruleus. Scale bars, 500  $\mu$ m in (B); 1 mm in (C).



**Supplementary Figure S2.** Retrograde tracing of input to the GCs of the medial OB. (A) Strategy for input tracing from the GCs using RV-ΔG-mCherry. (B) Example image showing the injection site (indicated by arrow) in the GCL of the medial OB. (C) Example images showing fluorescently labeled input neurons in major brain areas. AON, anterior olfactory nucleus; PC, piriform cortex; TT, taenia tecta; BF, basal forebrain; NLOT, lateral olfactory tract nucleus; HIP, hippocampal region; LEC, lateral entorhinal cortex; COA, cortical amygdalar nucleus; LC, locus coeruleus. Scale bars, 500  $\mu$ m in (B); 1 mm in (C).