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Supplementary Data

Decreased Level of Olfactory Receptors in Blood Cells Following Traumatic Brain Injury and Potential Association with Tauopathy

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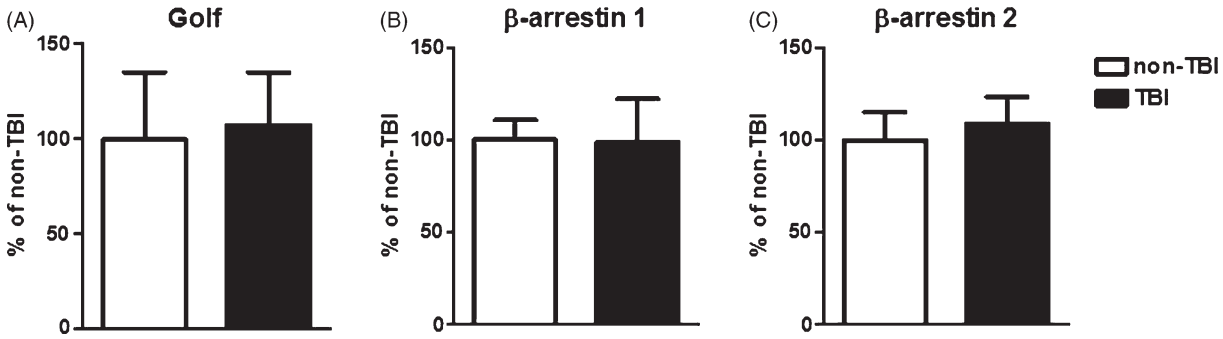
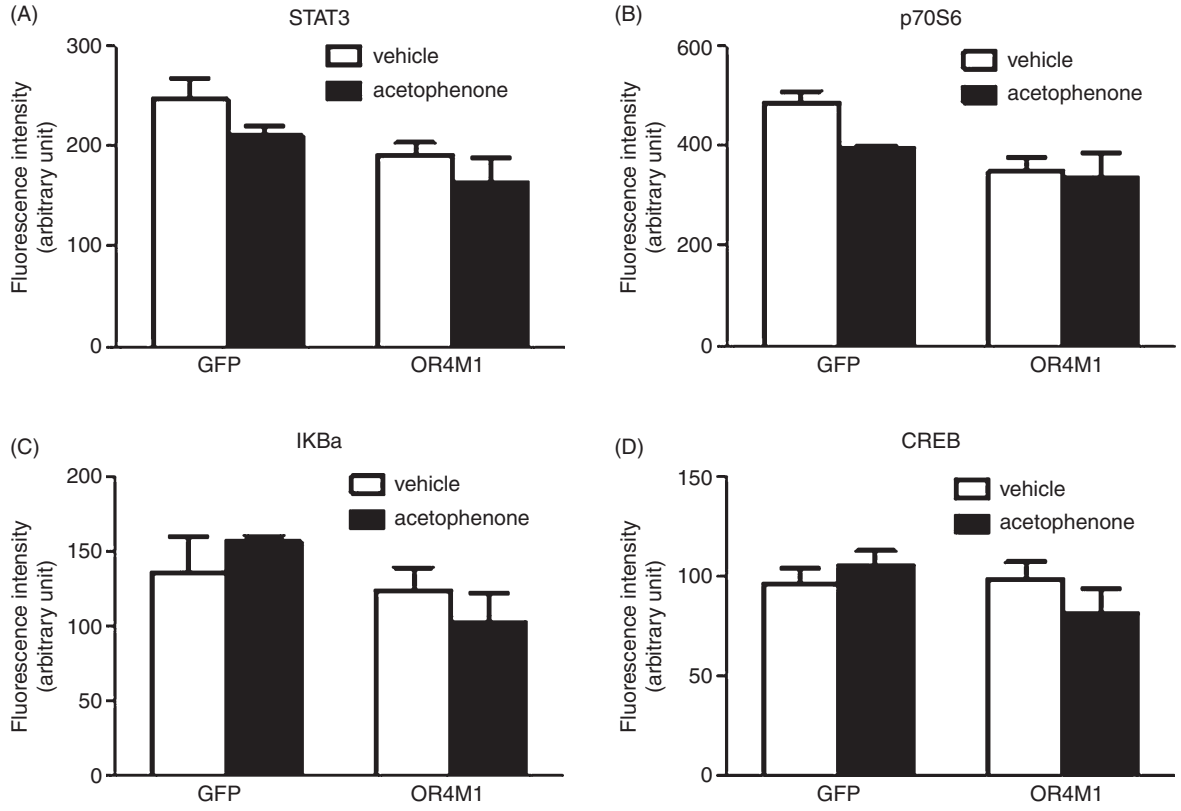


Supplementary Figure 1. Golf and arrestin levels remain unchanged in traumatic brain injury (TBI) subjects. The mRNA contents for (A) Golf, (B) β-arrestin 1, and (C) β-arrestin 2 in TBI and control cases from a veteran study cohort were analyzed by qPCR. Bar graphs represent mean + SEM. $^{*}p < 0.05$ by student *t*-test, TBI versus control.



Supplementary Figure 2. Activation of OR4M1 and downstream signaling pathways. Primary cortico-hippocampal neuron culture was transduced with lentiviral particles overexpressing OR4M1 or control lentiviral particles by spin infection (250 $g \times 90$ min at 30°C). Transduced neurons were treated with acetophenone for 1 h, and multiplex luminex assay was performed using the Milliplex xMAP 8-plex multipathway signaling-phosphoprotein kin (Millipore) according to manufacturer's protocol. No changes of (A) STAT3 phosphorylation on Ser 727, (B) p70 S6 kinase phosphorylation on Thr412, (C) IkBa phosphorylation on Ser32, and (D) CREB phosphorylation on Ser133 was detected.