

**PRODUCT INFORMATION**

|   |   |
|---|---|
| <b>Tag</b>                              | C-Flag Tag  |
| <b>Target</b>                           | OR2B3   |
| <b>Synonyms</b>                         | 6M1-1; OR2B3P; OR6-4; OR6-14  |
| <b>Description</b>                      | Human OR2B3 full length protein-synthetic nanodisc  |
| <b>Delivery</b>                         | In Stock  |
| <b>Uniprot ID</b>                       | O76000  |
| <b>Expression Host</b>                  | HEK293  |
| <b>Protein Families</b>                 | Transmembrane   |
| <b>Protein Pathways</b>                 | Olfactory transduction  |
| <b>Molecular Weight</b>                 | The human full length OR2B3 protein has a MW of 35.5 kDa  |
| <b>Formulation &amp; Reconstitution</b> | Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.  |
| <b>Storage&amp;Shipping</b>             | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.   |
| <b>Background</b>                       | Olfactory receptors interact with odorant molecules in the nose, to initiate a neuronal response that triggers the perception of a smell. The olfactory receptor proteins are members of a large family of G-protein-coupled receptors (GPCR) arising from single coding-exon genes. Olfactory receptors share a 7-transmembrane domain structure with many neurotransmitter and hormone receptors and are responsible for the recognition and G protein-mediated transduction of odorant signals. The olfactory receptor gene family is the largest in the genome. The nomenclature assigned to the olfactory receptor genes and proteins for this organism is independent of other organisms. |
| <b>Usage</b>                            | Research use only   |
| <b>Conjugate</b>                        | Unconjugated  |



### ELISA assay to evaluate OR2B3-Nanodisc 0.2 $\mu$ g Human OR2B3-Nanodisc per well

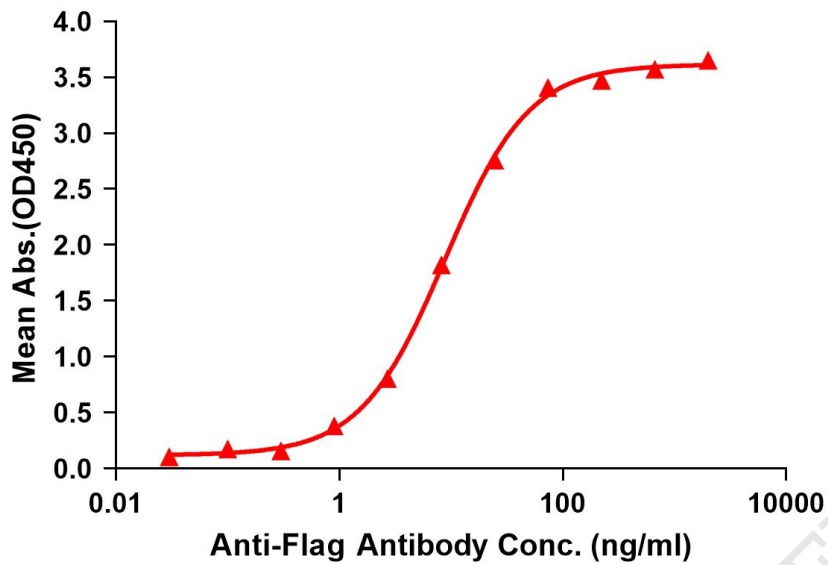


Figure 1. Elisa plates were pre-coated with Flag Tag OR2B3-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with OR2B3-Nanodisc is 8.804ng/ml.

kDa M R

250  
130  
100  
70  
55  
35  
25  
15  
10



Figure 2. WB analysis of Human OR2B3-Nanodisc with anti-Flag monoclonal antibody at 1/5000 dilution, followed by Goat Anti-Rabbit IgG HRP at 1/5000 dilution

