

## HUMAN OR52D1 FULL LENGTH PROTEIN

**Cat.#:** 11118

**Product Name:** Human OR52D1 Full Length Protein

**Size:** 10 µg; 50 µg and 100 µg

**Synonyms:** OR11-43

**Target:** OR52D1

**UNIPROT ID:** Q9H346

**Description:** Human OR52D1 Full Length Protein-Synthetic Nanodisc

**Background:** 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.

**Species/Host:** HEK293

**Molecular Weight:** The human full length OR52D1 protein has a MW of 35.1 kDa

**Formulation & Reconstitution:** 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.

**Storage & Shipping:** 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.

**Protein Families:** Transmembrane

**Protein Pathways:** Olfactory transduction

### ELISA assay to evaluate OR52D1-Nanodisc 0.2µg Human OR52D1-Nanodisc per well

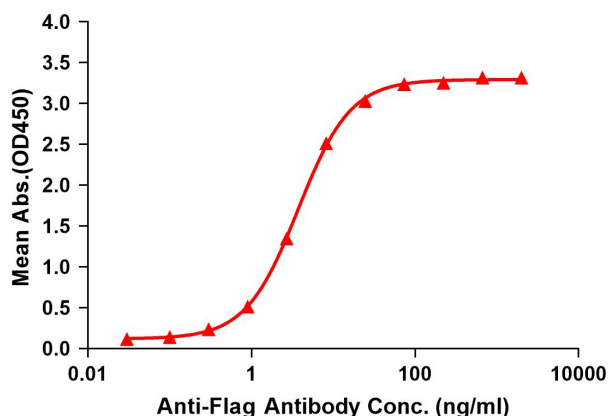


Figure 1. Elisa plates were pre-coated with Flag Tag OR52D1-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with OR52D1-Nanodisc is 3.737ng/ml.

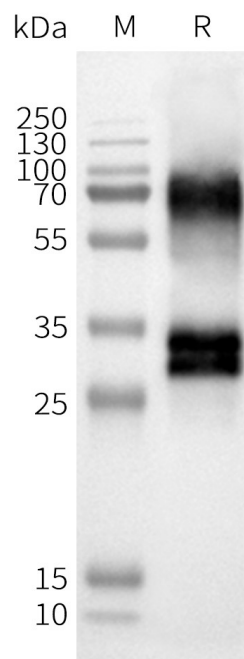


Figure 2. WB analysis of Human OR52D1-Nanodisc with anti-Flag monoclonal antibody at 1/5000 dilution, followed by Goat Anti-Rabbit IgG HRP at 1/5000 dilution