

Product Information

MemDX™ Recombinant Human OR1A1 Membrane Protein in Virus-Like Particles (MP-VLPs)

Cat. No.: **S01YF-0622-KX120**

This product is for research use only and is not intended for diagnostic use.

This product is recombinant Human OR1A1 in VLPs form. This product is produced from HEK293 by co-expressing the retroviral structural core polyprotein (gag) and the target membrane protein. MP-VLPs display highly-expressed copies of membrane proteins in their native conformation, providing an alternative to membrane protein stable cell lines, membrane preparations, detergent-solubilized proteins and other membrane protein preparation strategies. MP-VLPs can be used for a wide range of applications in antibody production, antibody discovery, antibody characterization, binding assays and functional assays.

Product Specifications

Host Species

Human

Target Protein

OR1A1

Protein Length

Full length

Protein Class

GPCR

TMD

7

Sequence

MRENNQSSTLEFILLGVTGQQEQEDFFYILFLFIYPITLIGNLLIVLAICSDVRLHNPMYFLLANLSLVDIFFSSVTIPKMLANHLLGSKSIS

Product Description

Application

ELISA; Antibody Production; Antibody Discovery; Antibody Characterization; Binding Assays; Functional Assays

Expression Systems

HEK293 expression system

Tag

10xHis tag at the C-terminus

Protein Format

Membrane Protein-Virus Like Particles (MP-VLPs)

Form

Liquid

Buffer

PBS, 6% Trehalose, pH 7.4

Storage

The product should be stored at -20°C or lower. Avoid freeze-thaw cycles.

Target**Target Protein**

OR1A1

Full Name

Olfactory receptor family 1 subfamily A member 1

Introduction

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.

Alternative Names

OR1A1; OR17-7; olfactory receptor 1A1; olfactory receptor 17-7; olfactory receptor OR17-11; Olfactory receptor family 1 subfamily A member 1

Gene ID

[8383](#)

UniProt ID

[Q9P1Q5](#)