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Product Information

MemDX™ Recombinant Human OPN1LW Membrane Protein in Virus-Like Particles (MP-VLPs)

Cat. No.: **S01YF-0622-KX163**
This product is for research use only and is not intended for diagnostic use.

This product is recombinant Human OPN1LW 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
OPN1LW

Protein Length
Full length

Protein Class
GPCR

TMD
7

Sequence
MAQQWSLQRLAGRHPQDSYEDSTQSSIFTYTNSNSTRGPFEGPNYHIAPRWVYHLTSVWMIFVVTASVFTNGLVLAATMKFKKLRH

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

OPN1LW

Full Name

Opsin 1, long wave sensitive

Introduction

This gene encodes for a light absorbing visual pigment of the opsin gene family. The encoded protein is called red cone photopigment or long-wavelength sensitive opsin. Opsins are G-protein coupled receptors with seven transmembrane domains, an N-terminal extracellular domain, and a C-terminal cytoplasmic domain. This gene and the medium-wavelength opsin gene are tandemly arrayed on the X chromosome and frequent unequal recombination and gene conversion may occur between these sequences. X chromosomes may have fusions of the medium- and long-wavelength opsin genes or may have more than one copy of these genes. Defects in this gene are the cause of partial, protanopic colorblindness.

Alternative Names

OPN1LW; CBP; RCP; ROP; CBBM; COD5; long-wave-sensitive opsin 1; cone dystrophy 5 (X-linked); opsin 1 (cone pigments), long-wave-sensitive; red cone opsin; red cone photoreceptor pigment; red-sensitive opsin; Opsin 1, long wave sensitive

Gene ID

5956

UniProt ID

P04000