

Product Information

MemDX™ Membrane Protein Human OPN1MW2 (Opsin 1, medium wave sensitive 2) Full Length

Cat. No.: **MPC2795K**

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

This product is a made-to-order Human OPN1MW2 membrane protein expressed in Baculovirus/Insect expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

OPN1MW2

Protein Length

Full length

Protein Class

GPCR

TMD

7

Sequence

MAQQWSLQRLAGRHPQDSYEDSTQSSIFTYTNSNSTRGPFEGPNYHIAPR
WVYHLTSVWMIFVVIASVFTNGLVLAATMKFKLRHPLNWILVNLAVAL
AETVIASISVQNQVYGYFVLGHPMCVLEGYTVSLCGITGLWSLAIISWE
RWMVVCKPFGNVRFDKLAIVGIAFSWIWAAVWTAPPIFGWSRYWPHGLK
TSCGPDVFSGSSYPGVQSYMIVLMVTCCITPLSIIVLCYLQVWLAIKRA
KQKKESESTQKAEKEVTRMVVVMVLAFCFCWGPYAFFACFAAANPGYPFH
PLMAALPAFFAKSATIYNPVIYVFMNRQFRNCILQLFGKKVDDGSELSSA
SKTEVSSVSSVSPA

Product Description

Expression Systems

Baculovirus/Insect expression system

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

Target**Target Protein**

OPN1MW2

Full Name

Opsin 1, medium wave sensitive 2

Introduction

This gene encodes for a light absorbing visual pigment of the opsin gene family. The encoded protein is called green cone photopigment or medium-wavelength sensitive opsin. Opsins are G-protein coupled receptors with seven transmembrane domains, an N-terminal extracellular domain, and a C-terminal cytoplasmic domain. The long-wavelength opsin gene and multiple copies of 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 deutanopic colorblindness.

Alternative Names

OPN1MW2; GOP; medium-wave-sensitive opsin 1; green cone photoreceptor pigment; green-sensitive opsin; opsin 1 (cone pigments), medium-wave-sensitive 2; opsin 1 cone pigments medium-wave-sensitive 2; Opsin 1, medium wave sensitive 2

Gene ID

[728458](#)

UniProt ID

[P0DN77](#)