

## 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

MAQQWSQLQRLAGRHPQDSYEDSTQSSIFTYNSNSTRGPFEGPNYHIAPR  
WVYHLTSVWMIFVVIASVFTNGLVLAATMKFKLRHPLNWILVNLAVADL  
AETVIASTISVVNVYGYFVLGHPMCVLEGYTVSLCGITGLWSLAIISWE  
RWMVVCKPFGNVRFDAKLAIVGIAFSWIAAVWTAPPIFGWSRYWPHGLK  
TSCGPDVFSGSSYPGVQSYMIVLMVTCCITPLSIVLCYLQVWLAIRAVA  
KQQKESESTQKAEKEVTRMVVVMVLAFCFCWGPYAFFACFAAANPGYPFH  
PLMAALPAFFAKSATIYNPIYVFMRQFRNCILQLFGKKVDDGSELSSA  
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](#)