

Product Information

MemDX™ Membrane Protein Human OPN1LW (Opsin 1, long wave sensitive) Expressed *in vitro* E.coli expression system, Full Length

Cat. No.: **MPX4076K**

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

This product is a Human OPN1LW membrane protein expressed *in vitro* E.coli 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

OPN1LW

Protein Length

Full Length

Protein Class

GPCR

Molecular Weight

43.4 kDa

TMD

7

Sequence

MAQQWSLQRLAGRHPQDSYEDSTQSSIFTYTNSNSTRGPFEGPNYHIAPRWVYHLTSVWMIFVVTASVFTNGLVLAATMKFKKLR

Product Description

Expression Systems

in vitro E.coli expression system

Tag

10xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Purity

>85% as determined by SDS-PAGE.

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°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; 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; Opsin 1, long wave sensitive

Gene ID

[5956](#)

UniProt ID

[P04000](#)