

# **Product Information**

# MemDX™ Membrane Protein Human OPN1MW (Opsin 1, medium wave sensitive) Full Length

Cat. No.: MPC0313K

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

This product is a 40.5 kDa Human OPN1MW 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**

**OPN1MW** 

#### **Protein Length**

Full length

#### **Protein Class**

**GPCR** 

## **Molecular Weight**

40.5 kDa

#### **TMD**

7

#### Sequence

MAQQWSLQRLAGRHPQDSYEDSTQSSIFTYTNSNSTRGPFEGPNYHIAPR WVYHLTSVWMIFVVIASVFTNGLVLAATMKFKKLRHPLNWILVNLAVADL AETVIASTISVVNQVYGYFVLGHPMCVLEGYTVSLCGITGLWSLAIISWE RWMVVCKPFGNVRFDAKLAIVGIAFSWIWAAVWTAPPIFGWSRYWPHGLK TSCGPDVFSGSSYPGVQSYMIVLMVTCCITPLSIIVLCYLQVWLAIRAVA KQQKESESTQKAEKEVTRMVVVMVLAFCFCWGPYAFFACFAAANPGYPFH PLMAALPAFFAKSATIYNPVIYVFMNRQFRNCILQLFGKKVDDGSELSSA SKTEVSSVSSVSPA

## **Product Description**

# **Expression Systems**

Baculovirus/Insect expression system

## Tag

Based on specific requirements

#### **Protein Format**

Detergent or based on specific requirements

#### **Form**

Liquid

## **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**

**OPN1MW** 

#### **Full Name**

Opsin 1, medium wave sensitive

#### 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**

CBD; GCP; GOP; CBBM; COD5; OPN1MW1; medium-wave-sensitive opsin 1; cone dystrophy 5 (X-linked); green cone photoreceptor pigment; green cone pigment; green-sensitive opsin; opsin 1 (cone pigments), medium-wave-sensitive; photopigment apoprotein; OPN1MW; Opsin 1, medium wave sensitive

#### Gene ID

2652

# **UniProt ID**

P04001

SUITE 203, 17 Ramsey Road, Shirley, NY 11967, USA Tel: 1-631-416-1478 Fax: 1-631-207-8356