

## Product Information

### MemDX™ Membrane Protein Human OPN1SW (Opsin 1, short wave sensitive) Full Length

Cat. No.: **MPC1087K**

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

This product is a 39.1 kDa Human OPN1SW membrane protein expressed in HEK293. 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

OPN1SW

##### Protein Length

Full length

##### Protein Class

GPCR

##### Molecular Weight

39.1 kDa

##### TMD

7

##### Sequence

MRKMSEEEFYLFKNISSVGPWDGPQYHIAPVWAFYLQAAFMGTVFLIGFP  
LNAMVLVATLRYKKLRQPLNYILVNVSFGGFLLCIFSVFPVFVASCNGYF  
VFGRHVCALEGFLGTVAGLVTGWSLAFLAFERYIVICKPFGNFRFSSKHA  
LTVVLATWTIGIGVSIPFFGWSRFIPEGLQCSCGPDWYTVGTYRSESY  
TWFLFIFCFIVPLSLICFSYQLLRALKAVAAQQQESATTQKAEREVSRM  
VVVMVGSFCVCYVPYAAFAMYMVNNRNHGLDLRLVTIPSFFSKSACIYNP  
IICYCFMNKQFQACIMKMVCGKAMTDESDTCSSQKTEVSTVSSTQVGPN

#### Product Description

##### Expression Systems

HEK293

##### 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**

OPN1SW

**Full Name**

Opsin 1, short wave sensitive

**Introduction**

This gene belongs to the G-protein coupled receptor 1 family, opsin subfamily. It encodes the blue cone pigment gene which is one of three types of cone photoreceptors responsible for normal color vision. Defects in this gene are the cause of tritan color blindness (tritanopia). Affected individuals lack blue and yellow sensory mechanisms while retaining those for red and green. Defective blue vision is characteristic.

**Alternative Names**

OPN1SW; BCP; BOP; CBT; short-wave-sensitive opsin 1; blue cone photoreceptor pigment; blue-sensitive opsin; opsin 1 (cone pigments), short-wave-sensitive; Opsin 1, short wave sensitive

**Gene ID**

[611](#)

**UniProt ID**

[P03999](#)