

## OPN1MW Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4917a

### Specification

### **OPN1MW Antibody (N-term) - Product Information**

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region FC, WB,E <u>P04001</u> 012948, P04000, P22329, 035476, P0DN77, <u>P0DN78</u> Human Rat, Chicken, Xenopus Rabbit Polyclonal Rabbit IgG 40584 21-50

### **OPN1MW Antibody (N-term) - Additional Information**

### Gene ID 101060233;2652

**Other Names** 

Medium-wave-sensitive opsin 1, Green cone photoreceptor pigment, Green-sensitive opsin, GOP, OPN1MW, GCP

#### Target/Specificity

This OPN1MW antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 21-50 amino acids from the N-terminal region of human OPN1MW.

**Dilution** FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

OPN1MW Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **OPN1MW Antibody (N-term) - Protein Information**



# Name OPN1MW (<u>HGNC:4206</u>)

Synonyms GCP

**Function** Visual pigments are the light-absorbing molecules that mediate vision. They consist of an apoprotein, opsin, covalently linked to cis-retinal.

**Cellular Location** Cell membrane; Multi-pass membrane protein

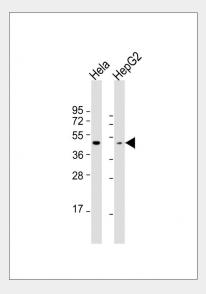
**Tissue Location** The three color pigments are found in the cone photoreceptor cells.

### **OPN1MW Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

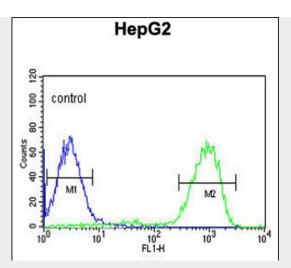
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**OPN1MW Antibody (N-term) - Images** 



All lanes : Anti-OPN1MW Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





OPN1MW Antibody (N-term) (Cat. #AP4917a) flow cytometric analysis of HepG2 K10cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# **OPN1MW Antibody (N-term) - Background**

OPN1MW 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.

# **OPN1MW Antibody (N-term) - References**

Thirumuruganandham, S.P., et al. J Mol Model 15(8):959-969(2009) Ala-Laurila, P., et al. J. Biol. Chem. 284(24):16492-16500(2009) Holmes, M.V., et al. PLoS ONE 4 (12), E7960 (2009)