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OPN1SW Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP14303a

Specification

OPN1SW Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P03999

OPN1SW Antibody (N-term) Blocking Peptide - Additional Information

Other Names
Short-wave-sensitive opsin 1, Blue cone photoreceptor pigment, Blue-sensitive opsin, BOP, OPN1SW, BCP

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

OPN1SW Antibody (N-term) Blocking Peptide - Protein Information

Name OPN1SW

Synonyms BCP

Function
Visual pigments are the light-absorbing molecules that mediate vision. They consist of an apoprotein, opsin, covalently linked to cis-retinal (Probable). Required for the maintenance of cone outer segment organization in the ventral retina, but not essential for the maintenance of functioning cone photoreceptors (By similarity). Involved in ensuring correct abundance and localization of retinal membrane proteins (By similarity). May increase spectral sensitivity in dim light (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein. Photoreceptor inner segment {ECO:0000250|UniProtKB:P51491}. Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:P51491}. Cytoplasm, perinuclear region

Tissue Location
The three color pigments are found in the cone photoreceptor cells (PubMed:2937147). Expressed throughout the epidermis and dermis, primarily in the stratum granulosum in the facial and abdominal skin (at protein level) (PubMed:30168605). Expressed in dermal fibroblasts (at protein level) (PubMed:31380578). Expressed in melanocytes (at protein level) (PubMed:31730232)

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OPN1SW Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

OPN1SW Antibody (N-term) Blocking Peptide - Images

OPN1SW Antibody (N-term) Blocking Peptide - Background

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

OPN1SW Antibody (N-term) Blocking Peptide - 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)Tsutsumi, M., et al. Exp. Dermatol. 18(6):567-570(2009)Luttrell, L.M. Mol. Biotechnol. 39(3):239-264(2008)Fitzgibbon, J., et al. Hum. Genet. 93(1):79-80(1994)