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(DANRE) rho Blocking Peptide (N-Term)

Synthetic peptide
Catalog # BP21294a

Specification

(DANRE) rho Blocking Peptide (N-Term) - Product Information

Primary Accession P35359

(DANRE) rho Blocking Peptide (N-Term) - Additional Information

Gene ID 30295

Other Names
Rhodopsin, rho, zfo2

Target/Specificity
The synthetic peptide sequence is selected from aa 62-73 of HUMAN rho

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.

(DANRE) rho Blocking Peptide (N-Term) - Protein Information

Name rho

Synonyms zfo2

Function
Photoreceptor required for image-forming vision at low light intensity. While most salt water fish species use retinal as chromophore, most freshwater fish use 3-dehydroretinal, or a mixture of retinal and

(DANRE) rho Blocking Peptide (N-Term) - Background

Visual pigments such as rhodopsin and porphyropsin are light-absorbing molecules that mediate vision. Rhodopsin consists of an apoprotein, opsin, covalently linked to 11-cis-retinal. This receptor is coupled to the activation of phospholipase C. Porphyropsin consists of opsin covalently linked to 11-cis 3,4- didehydroretinal.

(DANRE) rho Blocking Peptide (N-Term) - References

Robinson J.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:6009-6012(1993).
Robinson J.,et al.Vis. Neurosci. 12:895-906(1995).
Schmitt E.A.,et al.Vis. Neurosci. 16:601-605(1999).
Vihtelic T.S.,et al.Vis. Neurosci. 16:571-585(1999).
Kennedy B.N.,et al.J. Biol. Chem. 276:14037-14043(2001).

3-dehydroretinal (By similarity). Light-induced isomerization of 11-cis to all-trans retinal triggers a conformational change that activates signaling via G-proteins. Subsequent receptor phosphorylation mediates displacement of the bound G-protein alpha subunit by arrestin and terminates signaling (By similarity).

Cellular Location
Membrane {ECO:0000250|UniProtKB:P08100}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P08100}. Cell projection, cilium, photoreceptor outer segment Note=Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to disk membranes in the rod outer segment (OS) photosensory cilia. {ECO:0000250|UniProtKB:P08100}

Tissue Location
Retinal rod photoreceptor cells, predominantly in the outer segments (at protein level) (PubMed:10349976). Retinal rod photoreceptor cells (PubMed:8327475, PubMed:8603882)

(DANRE) rho Blocking Peptide (N-Term) - Protocols

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

- Blocking Peptides