

**(DANRE) rho Blocking Peptide (N-Term)**  
**Synthetic peptide**  
**Catalog # BP21294a**

**Specification**

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**(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 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](#)

**(DANRE) rho Blocking Peptide (N-Term) - Images****(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**

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Schmitt E.A.,et al.Vis. Neurosci. 16:601-605(1999).  
Vihtelic T.S.,et al.Vis. Neurosci. 16:571-585(1999).  
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