

RCVRN Blocking Peptide (C-term)

Synthetic peptide Catalog # BP20666c

Specification

RCVRN Blocking Peptide (C-term) - Product Information

Primary Accession P35243
Other Accession P34057

RCVRN Blocking Peptide (C-term) - Additional Information

Gene ID 5957

Other Names

Recoverin, Cancer-associated retinopathy protein, Protein CAR, RCVRN, RCV1

Target/Specificity

The synthetic peptide sequence is selected from aa 137-151 of HUMAN RCVRN

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.

RCVRN Blocking Peptide (C-term) - Protein Information

Name RCVRN

Synonyms RCV1

Function

Acts as a calcium sensor and regulates phototransduction of cone and rod photoreceptor cells (By similarity). Modulates light sensitivity of cone photoreceptor in dark and dim conditions (By similarity). In response to high Ca(2+) levels induced by low light levels, prolongs RHO/rhodopsin activation in rod photoreceptor cells by binding to and inhibiting GRK1-mediated phosphorylation of RHO/rhodopsin (By similarity). Plays a role in scotopic vision/enhances vision in dim light by enhancing signal transfer between rod photoreceptors and rod bipolar cells (By similarity). Improves rod photoreceptor sensitivity in dim light and mediates response of rod photoreceptors to facilitate detection of change and motion in bright light (By similarity).

Cellular Location

Photoreceptor inner segment {ECO:0000250|UniProtKB:P34057}. Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:P34057}. Photoreceptor outer segment



membrane {ECO:0000250|UniProtKB:P21457}; Lipid-anchor {ECO:0000250|UniProtKB:P21457}; Cytoplasmic side {ECO:0000250|UniProtKB:P21457}. Perikaryon {ECO:0000250|UniProtKB:P34057}. Note=Primarily expressed in the inner segments of light-adapted rod photoreceptors, approximately 10% of which translocates from photoreceptor outer segments upon light stimulation (By similarity). Targeting of myristoylated protein to rod photoreceptor outer segments is calcium dependent (By similarity) {ECO:0000250|UniProtKB:P21457, ECO:0000250|UniProtKB:P34057}

Tissue Location

Retina and pineal gland.

RCVRN Blocking Peptide (C-term) - Protocols

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

Blocking Peptides

RCVRN Blocking Peptide (C-term) - Images

RCVRN Blocking Peptide (C-term) - Background

Seems to be implicated in the pathway from retinal rod guanylate cyclase to rhodopsin. May be involved in the inhibition of the phosphorylation of rhodopsin in a calcium-dependent manner. The calcium-bound recoverin prolongs the photoresponse.

RCVRN Blocking Peptide (C-term) - References

Murakami A., et al. Biochem. Biophys. Res. Commun. 187:234-244(1992). Wiechmann A.F., et al. Exp. Eye Res. 56:463-470(1993). Thirkill C.E., et al. Invest. Ophthalmol. Vis. Sci. 33:2768-2772(1992). Matsubara S., et al. Br. J. Cancer 74:1419-1422(1996). Polans A.S., et al. J. Cell Biol. 112:981-989(1991).