10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Rcvrn Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP19308a

Specification

Mouse Rcvrn Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P34057

Mouse Rcvrn Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 19674

Other Names
Recoverin, 23 kDa photoreceptor cell-specific protein, Cancer-associated retinopathy protein, Protein CAR, Rcvrn, Rcv1

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.

Mouse Rcvrn Antibody (N-term) Blocking Peptide - 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 (PubMed:25673692). 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 (PubMed:15882641). Improves rod photoreceptor sensitivity in dim light and mediates response of rod photoreceptors to facilitate detection of change and motion in bright light (PubMed:29435986).

Cellular Location
Photoreceptor inner segment. Cell projection, cilium, photoreceptor outer segment Photoreceptor outer segment membrane {ECO:0000250|UniProtKB:P21457}; Lipid-anchor

{ECO:0000250|UniProtKB:P21457}; Cytoplasmic side {ECO:0000250|UniProtKB:P21457}. Perikaryon. Note=Primarily expressed in the inner segments of light-adapted rod photoreceptors, approximately 10% of which translocates from photoreceptor outer segments upon light stimulation (PubMed:15961391). Targeting of myristoylated protein to rod photoreceptor outer segments is calcium dependent (By similarity) {ECO:0000250|UniProtKB:P21457, ECO:0000269|PubMed:15961391}

Tissue Location
Expressed in rod photoreceptors in the retina (at protein level).

Mouse Rcvrn Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse Rcvrn Antibody (N-term) Blocking Peptide - Images

Mouse Rcvrn Antibody (N-term) Blocking Peptide - Background

Rcvrn 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.

Mouse Rcvrn Antibody (N-term) Blocking Peptide - References

Jin, K., et al. J. Neurosci. 30(36):11902-11916(2010)Georgi, S.A., et al. J. Neurosci. 30(11):4048-4061(2010)Sanuki, R., et al. FEBS Lett. 584(4):753-758(2010)Brzezinski, J.A. IV, et al. Development 137(4):619-629(2010)Chen, C.K., et al. J. Neurosci. 30(4):1213-1220(2010)