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Recoverin Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1565b

Specification

Recoverin Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	P35243
Other Accession	S43855

Recoverin Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 5957

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1565b was selected from the C-term region of human Recoverin . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

Recoverin Antibody (C-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 (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.

Recoverin Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

Recoverin Antibody (C-term) Blocking Peptide - Images

Recoverin Antibody (C-term) Blocking Peptide - Background

Recoverin belongs to a high-affinity calcium-binding family that includes neuronal calcium sensor-1, visinin-like proteins (VILIPs), guanylate cyclase-activating proteins (GCAPs), and Kv-channel interacting proteins (KchIPs). Features common to this family include four calcium-binding EF-hand domains, and an N-terminal myristoylation sequence. This family of proteins has been implicated in a broad range of cellular signaling functions, including phototransduction and neurotransmitter release, lipid metabolism, gene expression, and ion channel regulation. Myristoylation, the post-translational addition of a fatty acid tail, has been shown to have functional significance for other calcium-binding protein family members. Recoverin is subject to the posttranslational modification of myristoylation. Binding of calcium to recoverin elicits a change in conformation that exposes the buried hydrophobic myristoyl moiety to interaction with cell membranes and other cellular proteins.

Recoverin Antibody (C-term) Blocking Peptide - References

Wiechmann, A., et al., Curr. Eye Res. 26(1):25-32 (2003).Matsubara, S., et al., Br. J. Cancer 74(9):1419-1422 (1996).Yamaji, Y., et al., Int. J. Cancer 65(5):671-676 (1996).McGinnis, J.F., et al., Mamm. Genome 4(1):43-45 (1993).Wiechmann, A.F., et al., Exp. Eye Res. 56(4):463-470 (1993).