

Recoverin Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1565b

Product Information

Application	WB, IHC-P, E
Primary Accession	P35243
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0511
Calculated MW	23130
Antigen Region	169-200

Additional Information

Gene ID	5957
Other Names	Recoverin, Cancer-associated retinopathy protein, Protein CAR, RCVRN, RCV1
Target/Specificity	This Recoverin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 169-200 amino acids from the C-terminal region of human Recoverin.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Recoverin Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

Background

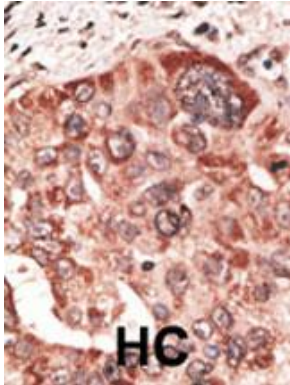
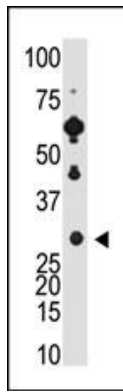
Recoverin belongs to a high-affinity calcium-binding family that includes neuronal calcium sensor-1, visinin-like proteins (VILIPs), guanylate cyclase-activating proteins (GCAPs), and Kv-channel interacting proteins (KchIPs). Features common to this family include four calcium-binding EF-hand domains, 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.

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).

Images

The anti-Recoverin C-term Pab (Cat. #AP1565b) is used in Western blot to detect Recoverin in Y79 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.