

Mouse Rcvrn Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19308a

Product Information

Application	WB, E
Primary Accession	P34057
Other Accession	NP_033064.1
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40183
Calculated MW	23407
Antigen Region	39-67

Additional Information

Gene ID	19674
Other Names	Recoverin, 23 kDa photoreceptor cell-specific protein, Cancer-associated retinopathy protein, Protein CAR, Rcvrn, Rcv1
Target/Specificity	This Mouse Rcvrn antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-67 amino acids from the N-terminal region of mouse Rcvrn.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Mouse Rcvrn Antibody (N-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 (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).

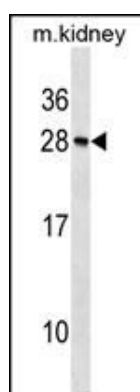
Background

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.

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)

Images



Mouse Rcvrn Antibody (N-term)(Cat. #AP19308a) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the Rcvrn antibody detected the Rcvrn protein (arrow).