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

RHO Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16977b

Specification

RHO Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P08100
Other Accession	Q28886, NP_000530.1
Reactivity	**Human, Mouse, Rat**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**38893**
Antigen Region	**310-339**

RHO Antibody (C-term) - Additional Information

Gene ID 6010

Other Names
Rhodopsin, Opsin-2, RHO, OPN2

Target/Specificity
This RHO antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 310-339 amino acids from the C-terminal region of human RHO.

Dilution
WB~~1:2000
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
RHO Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RHO Antibody (C-term) - Protein Information

Name RHO

Synonyms OPN2

Function Photoreceptor required for image-forming vision at low light intensity (PubMed:7846071, PubMed:8107847). Required for photoreceptor cell viability after birth (PubMed:12566452, PubMed:2215617). Light- induced isomerization of the chromophore 11-cis-retinal to all-trans-retinal triggers a conformational change that activates signaling via G-proteins (PubMed:26200343, PubMed:28524165, PubMed:28753425, PubMed:8107847). Subsequent receptor phosphorylation mediates displacement of the bound G-protein alpha subunit by the arrestin SAG and terminates signaling (PubMed:26200343, PubMed:28524165).

Cellular Location
Membrane; Multi-pass membrane protein. Cell projection, cilium, photoreceptor outer segment. Note=Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to disk membranes in the rod outer segment (OS) photosensory cilia

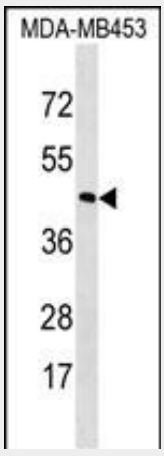
Tissue Location
Rod shaped photoreceptor cells which mediate vision in dim light

RHO Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RHO Antibody (C-term) - Images



RHO Antibody (C-term) (Cat. #AP16977b) western blot analysis in MDA-MB453 cell line lysates (35ug/lane).This demonstrates the RHO antibody detected the RHO protein (arrow).

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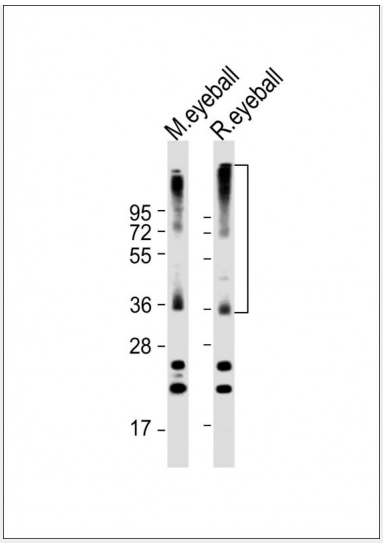

All lanes : Anti-RHO Antibody (C-term) at 1:2000 dilution Lane 1: mouse eyeball lysate Lane 2: rat eyeball lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

RHO Antibody (C-term) - Background

Retinitis pigmentosa is an inherited progressive disease which is a major cause of blindness in western communities. It can be inherited as an autosomal dominant, autosomal recessive, or X-linked recessive disorder. In the autosomal dominant form,which comprises about 25% of total cases, approximately 30% of families have mutations in the gene encoding the rod photoreceptor-specific protein rhodopsin. This is the transmembrane protein which, when photoexcited, initiates the visual transduction cascade. Defects in this gene are also one of the causes of congenital stationary night blindness.

RHO Antibody (C-term) - References

Clark, G.R., et al. Ophthalmology 117(11):2169-2177(2010)
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Audo, I., et al. Arch. Ophthalmol. 128(8):1036-1045(2010)
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