

# RHO Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16977b

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P08100</a>
<b>Other Accession</b>	<a href="#">Q28886</a> , <a href="#">NP_000530.1</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Predicted</b>	Monkey
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB36659
<b>Calculated MW</b>	38893
<b>Antigen Region</b>	310-339

## Additional Information

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<b>Gene ID</b>	6010
<b>Other Names</b>	Rhodopsin, Opsin-2, RHO, OPN2
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	RHO Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	RHO
<b>Synonyms</b>	OPN2
<b>Function</b>	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

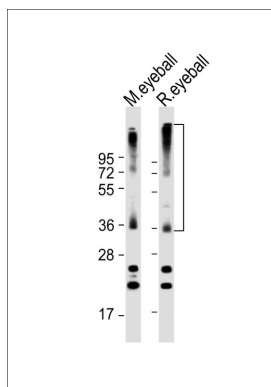
## Background

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.

## References

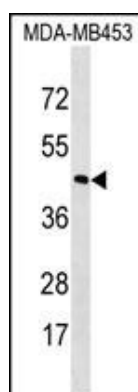
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## Images



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



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