

# (DANRE) rho Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21294a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P35359</a>
<b>Reactivity</b>	Zebrafish
<b>Host</b>	Rabbit
<b>Clonality</b>	polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB52315
<b>Calculated MW</b>	39706

## Additional Information

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<b>Gene ID</b>	30295
<b>Other Names</b>	Rhodopsin, rho, zfo2
<b>Target/Specificity</b>	This DANRE rho antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 62-93 amino acids from the human region of DANRE rho.
<b>Dilution</b>	WB~~1:2000 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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>	(DANRE) rho Antibody (N-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>	zfo2
<b>Function</b>	Photoreceptor required for image-forming vision at low light intensity. While most salt water fish species use retinal as chromophore, most freshwater fish use 3-dehydroretinal, or a mixture of retinal and 3-dehydroretinal (By similarity). Light-induced isomerization of 11-cis to

all-trans retinal triggers a conformational change that activates signaling via G-proteins. Subsequent receptor phosphorylation mediates displacement of the bound G-protein alpha subunit by arrestin and terminates signaling (By similarity).

#### Cellular Location

Membrane {ECO:0000250|UniProtKB:P08100}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P08100}. 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. {ECO:0000250|UniProtKB:P08100}

#### Tissue Location

Retinal rod photoreceptor cells, predominantly in the outer segments (at protein level) (PubMed:10349976). Retinal rod photoreceptor cells (PubMed:8327475, PubMed:8603882)

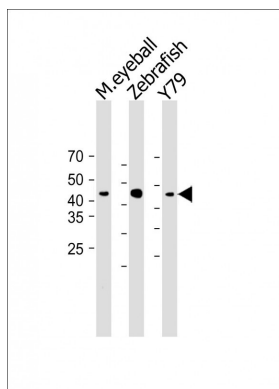
## Background

Visual pigments such as rhodopsin and porphyropsin are light-absorbing molecules that mediate vision. Rhodopsin consists of an apoprotein, opsin, covalently linked to 11-cis-retinal. This receptor is coupled to the activation of phospholipase C. Porphyropsin consists of opsin covalently linked to 11-cis 3,4-didehydroretinal.

## References

Robinson J.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:6009-6012(1993).  
Robinson J.,et al.Vis. Neurosci. 12:895-906(1995).  
Schmitt E.A.,et al.Vis. Neurosci. 16:601-605(1999).  
Vihtelic T.S.,et al.Vis. Neurosci. 16:571-585(1999).  
Kennedy B.N.,et al.J. Biol. Chem. 276:14037-14043(2001).

## Images



All lanes: Anti-(DANRE) rho Antibody (N-Term) at 1:1000 dilution Lane 1: Mouse eyeball lysate Lane 2: Zebrafish lysate Lane 3: Y79 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 45 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

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