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(DANRE) rho Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21294a

Product Information

Application	WB, E
Primary Accession	P35359
Reactivity	Zebrafish
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52315
Calculated MW	39706

Additional Information

Gene ID	30295
Other Names	Rhodopsin, rho, zfo2
Target/Specificity	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.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	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.
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	(DANRE) rho Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	rho
Synonyms	zfo2
Function	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)

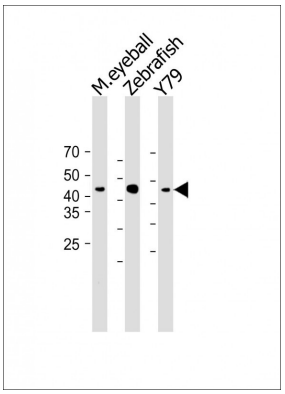
Background

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'.