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

PDE6H Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19799c

Product Information

Application	WB, E
Primary Accession	Q13956
Other Accession	P09174, P18545, P04972, P61250, P61249, P22571, NP_006196.1
Reactivity	Human, Mouse
Predicted	Bovine, Rat, Human, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40887
Calculated MW	9074
Antigen Region	4-33

Additional Information

Gene ID	5149
Other Names	Retinal cone rhodopsin-sensitive cGMP 3', 5'-cyclic phosphodiesterase subunit gamma, GMP-PDE gamma, PDE6H
Target/Specificity	This PDE6H antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 4-33 amino acids from the Central region of human PDE6H.
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	PDE6H Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PDE6H (HGNC:8790)
Function	Inhibitory gamma subunit of the cone-specific cGMP phosphodiesterase (PDE6) complex which hydrolyzes 3',5'-cyclic GMP in the phototransduction

	cascade (By similarity). The PDE6 holoenzyme consists of two catalytic alpha subunits (PDE6C) and two inhibitory gamma subunits (PDE6H) (By similarity). Light-activated GNAT2 relieves gamma subunit-mediated inhibition, allowing the catalytic subunits to hydrolyze cGMP and mediate visual signal transduction and amplification. The resulting decrease in cytosolic cGMP levels triggers the closure of cGMP-gated cation channels at the plasma membrane, leading to hyperpolarization of cone photoreceptors (By similarity). Inhibition by the gamma subunit is relatively dynamic and less tightly coupled than in rods, allowing transient access to the catalytic pocket and facilitating the rapid phototransduction kinetics characteristic of cones (By similarity).
Cellular Location	Photoreceptor outer segment membrane {ECO:0000250|UniProtKB:P61249}. Note=Localized in cone outer segment disk membranes. {ECO:0000250|UniProtKB:P61249}
Tissue Location	Expressed in the retina, specifically in cone photoreceptors.

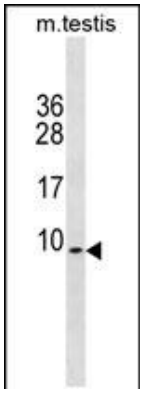
Background

This gene encodes the inhibitory (or gamma) subunit of the cone-specific cGMP phosphodiesterase, which is a tetramer composed of two catalytic chains (alpha and beta), and two inhibitory chains (gamma). It is specifically expressed in the retina, and is involved in the transmission and amplification of the visual signal. Mutations in this gene are associated with retinal cone dystrophy type 3A (RCD3A).

References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Piri, N., et al. Ophthalmology 112(1):159-166(2005)
Kajimura, N., et al. J. Struct. Biol. 139(1):27-38(2002)
Shimizu-Matsumoto, A., et al. Genomics 32(1):121-124(1996)

Images



PDE6H Antibody (Center) (Cat. #AP19799c) western blot analysis in mouse testis tissue lysates (35ug/lane).This demonstrates the PDE6H antibody detected the PDE6H protein (arrow).

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