G-Biosciences Image not found or type unknown

Immunotag™ Rhodopsin Polyclonal Antibody

Antibody Specification

Catalog No.	ITT4086
Product Description	Immunotag™ Rhodopsin Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	RHO Dopsin
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human Rhodopsin
Specificity	Rhodopsin Polyclonal Antibody detects endogenous levels of Rhodopsin protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	RHO
Accession No.	P08100 P15409 P51489
Alternate Names	RHO; OPN2; Rhodopsin; Opsin-2

Antibody Specification

Description	rhodopsin(RHO) Homo sapiens 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. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Regulation of Microtubule Dynamics, Regulation of Actin Dynamics, SAPK_JNK, B_Cell_Antigen
Protein Expression	Retina,
Subcellular Localization	Golgi membrane,photoreceptor outer segment,photoreceptor inner segment,Golgi apparatus,plasma membrane,integral component of plasma membrane,cell-cell junction,integral component of membrane,Golgi-associated vesicle membrane,photoreceptor outer segment membrane,
Protein Function	disease:Defects in RHO are a cause of retinitis pigmentosa autosomal recessive (ARRP) [MIM:268000].,disease:Defects in RHO are the cause of congenital stationary night blindness autosomal dominant type 1 (CSNBAD1) [MIM:610445]; also known as rhodopsin-related congenital stationary night blindness. Congenital stationary night blindness is a non-progressive retinal disorder characterized by impaired night vision.,disease:Defects in RHO are the cause of retinitis pigmentosa type 4 (RP4) [MIM:180380]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well. RP4 inheritance is autosomal dominant.,function:Photoreceptor required for image-forming vision at low light intensity. Required for photoreceptor cell viability after birth. Light-induced isomerization of 11-cis to all-trans retinal triggers a conformational change leading to G-protein activation and release of all-trans retinal.,online information:Retina International's Scientific Newsletter,online information:Rhodopsin entry,online information:Rhodopsin mutations page,PTM:Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region.,similarity:Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.,tissue specificity:Rod shaped photoreceptor cells which mediates vision in dim light.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.