

Product name:	Rhodopsin Rabbit Polyclonal Antibody
Cat number:	ABN17129
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Rhodopsin. AA range:299-348
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight:	42kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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. [provided by RefSeq, Jul 2008], 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 mediate vision in dim light.,