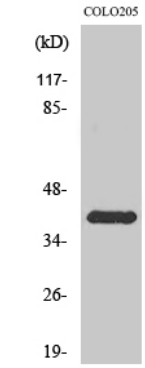
Rhodopsin Polyclonal Antibody

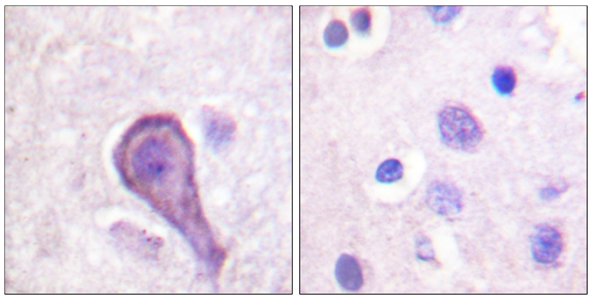
Catalog No	BYab-13671
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	RHO
Protein Name	Rhodopsin
Immunogen	The antiserum was produced against synthesized peptide derived from human Rhodopsin. AA range:299-348
Specificity	Rhodopsin Polyclonal Antibody detects endogenous levels of Rhodopsin protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RHO; OPN2; Rhodopsin; Opsin-2
Observed Band	42kD
Cell Pathway	Membrane ; Multi-pass membrane protein . Cell projection, cilium, photoreceptor outer segment . Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to disk membranes in the rod outer segment (OS) photosensory cilia. .
Tissue Specificity	Rod shaped photoreceptor cells which mediate vision in dim light.
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 photor
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

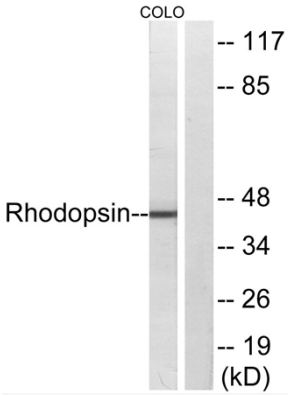
Products Images



Western Blot analysis of various cells using Rhodopsin Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Rhodopsin Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO cells, using Rhodopsin Antibody. The lane on the right is blocked with the synthesized peptide.