ARG41451
anti-Rhodopsin antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Rhodopsin
Tested Reactivity	Hu, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Rhodopsin
Species	Human
Immunogen	Synthetic peptide of Human Rhodopsin.
Conjugation	Un-conjugated
Alternate Names	Rhodopsin; Opsin-2; CSNBAD1; RP4; OPN2

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Rat eyeball
Observed Size	37 kDa

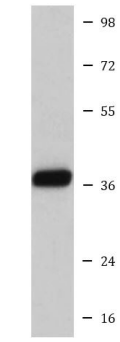
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	RHO
Gene Full Name	rhodopsin
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]
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. [UniProt]
Calculated Mw	39 kDa
PTM	Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region. Contains one covalently linked retinal chromophore. [UniProt]
Cellular Localization	Membrane; Multi-pass membrane protein. 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. [UniProt]

Images



Rat eyeball

ARG41451 anti-Rhodopsin antibody WB image

Western blot: Rat eyeball lysate stained with ARG41451 anti-Rhodopsin antibody.