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Anti-Rhodopsin Rabbit Monoclonal Antibody

Catalog # ABO14005

Product Information

Application	WB, IHC
Primary Accession	P08100
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-Rhodopsin Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Rat.

Additional Information

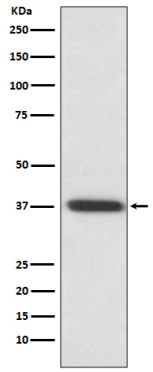
Gene ID	6010
Other Names	Rhodopsin, Opsin-2, RHO, OPN2
Calculated MW	38893
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Subcellular Localization	Membrane ; Multi-pass membrane protein. Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to the rod outer segment (OS) photosensory cilia.
Tissue Specificity	Rod shaped photoreceptor cells which mediates vision in dim light.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AADI-18
Immunogen	A synthesized peptide derived from human Rhodopsin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	RHO (HGNC:10012)

Synonyms	OPN2
Function	G protein-coupled photoreceptor that activates the G protein transducin (t) signaling pathway in response to light and is essential for image-forming vision under low-light conditions (PubMed:6140680, PubMed:7846071, PubMed:8107847). Required for postnatal photoreceptor cell viability (PubMed:12566452, PubMed:2215617). Activation occurs when the covalently bound 11-cis-retinal chromophore absorbs a photon and isomerizes to all-trans-retinal, inducing a conformational change in the opsin that triggers G protein-mediated phototransduction (Probable) (PubMed:26200343, PubMed:28753425, PubMed:8107847). Signal termination occurs via receptor phosphorylation, which promotes binding of arrestin (SAG) and displacement of the G protein alpha subunit (Probable) (PubMed:26200343).
Cellular Location	Photoreceptor outer segment membrane; Multi-pass membrane protein. Membrane; Multi-pass membrane protein 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.
Tissue Location	Rod shaped photoreceptor cells which mediate vision in dim light.

Images



Western blot analysis of Rhodopsin expression in rat eyeball lysate.

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