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Rhodopsin / RHO Antibody (Extracellular Domain)
Rabbit Polyclonal Antibody
Catalog # ALS10253

Specification

Rhodopsin / RHO Antibody (Extracellular Domain) - Product Information

Application	**IHC**
Primary Accession	P08100
Reactivity	**Human, Mouse, Rabbit, Monkey, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**39kDa KDa**

Rhodopsin / RHO Antibody (Extracellular Domain) - Additional Information

Gene ID 6010

Other Names
Rhodopsin, Opsin-2, RHO, OPN2

Target/Specificity
Human RHO / Rhodopsin. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
Rhodopsin / RHO Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

Rhodopsin / RHO Antibody (Extracellular Domain) - Protein Information

Name RHO

Synonyms OPN2

Function
Photoreceptor required for image-forming vision at low light intensity (PubMed:8107847, PubMed:7846071). Required for photoreceptor cell viability after birth (PubMed:2215617, PubMed:12566452). Light-induced isomerization of the chromophore 11-cis-retinal to all-trans- retinal triggers a conformational change that activates signaling via G-proteins (PubMed:8107847, PubMed:28524165, PubMed:<a

href="http://www.uniprot.org/citations/26200343" target="_blank">26200343, PubMed:28753425). Subsequent receptor phosphorylation mediates displacement of the bound G-protein alpha subunit by the arrestin SAG and terminates signaling (PubMed:28524165, PubMed:26200343).

Cellular Location
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

Tissue Location
Rod shaped photoreceptor cells which mediate vision in dim light

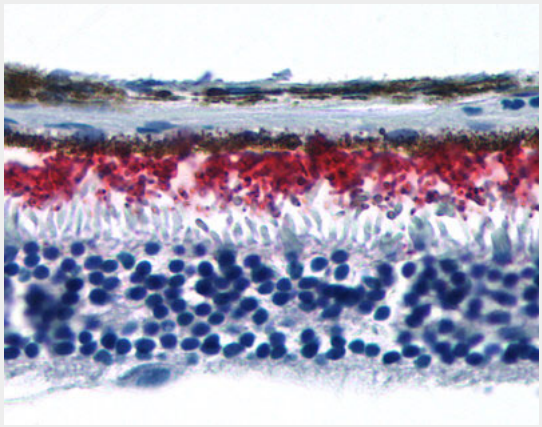
Volume
50 µl

Rhodopsin / RHO Antibody (Extracellular Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Rhodopsin / RHO Antibody (Extracellular Domain) - Images



Anti-RHO / Rhodopsin antibody ALS10253 IHC of human eye, retina.

Rhodopsin / RHO Antibody (Extracellular Domain) - Background

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.

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Rhodopsin / RHO Antibody (Extracellular Domain) - References

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Al-Maghtheh M.,et al.Hum. Mutat. 2:249-255(1993).