

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

Rhodopsin / RHO Antibody (Extracellular Domain) - Product Information

Application	IHC-P
Primary Accession	P08100
Reactivity	Human, Mouse, Rabbit, Monkey, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39kDa KDa
Dilution	IHC-P~~N/A

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:[7846071](http://www.uniprot.org/citations/7846071)), PubMed:[8107847](http://www.uniprot.org/citations/8107847)). Required for photoreceptor cell viability after birth (PubMed:[12566452](http://www.uniprot.org/citations/12566452)), PubMed:[2215617](http://www.uniprot.org/citations/2215617)). Light- induced isomerization of the chromophore 11-cis-retinal to all-trans- retinal triggers a conformational change that activates signaling via G-proteins (PubMed:[26200343](http://www.uniprot.org/citations/26200343)), PubMed:[26200343](http://www.uniprot.org/citations/26200343)).

[28524165](http://www.uniprot.org/citations/28524165), PubMed: [28753425](http://www.uniprot.org/citations/28753425), PubMed: [8107847](http://www.uniprot.org/citations/8107847)). Subsequent receptor phosphorylation mediates displacement of the bound G-protein alpha subunit by the arrestin SAG and terminates signaling (PubMed: [26200343](http://www.uniprot.org/citations/26200343), PubMed: [28524165](http://www.uniprot.org/citations/28524165)).

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

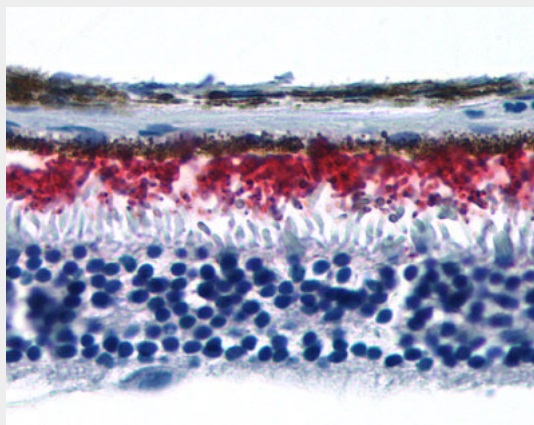
Volume

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 Cytometry](#)
- [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.

Rhodopsin / RHO Antibody (Extracellular Domain) - References

- Nathans J.,et al.Proc. Natl. Acad. Sci. U.S.A. 81:4851-4855(1984).
Suwa M.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Bennett J.,et al.Gene 167:317-320(1995).
Al-Maghtheh M.,et al.Hum. Mutat. 2:249-255(1993).