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Rhodopsin / RHO Antibody (clone A531)

Mouse Monoclonal Antibody
Catalog # ALS16110

Specification

Rhodopsin / RHO Antibody (clone A531) - Product Information

Application	**WB, IHC**
Primary Accession	P08100
Reactivity	**Human, Mouse, Rat, Pig, Bovine**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**39kDa KDa**

Rhodopsin / RHO Antibody (clone A531) - Additional Information

Gene ID 6010

Other Names
Rhodopsin, Opsin-2, RHO, OPN2

Reconstitution & Storage
+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions
Rhodopsin / RHO Antibody (clone A531) is for research use only and not for use in diagnostic or therapeutic procedures.

Rhodopsin / RHO Antibody (clone A531) - 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:26200343, PubMed:28753425). Subsequent receptor phosphorylation mediates displacement of the bound G-protein alpha subunit by the arrestin SAG and terminates signaling (PubMed:<a

href="http://www.uniprot.org/citations/28524165" target="_blank">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

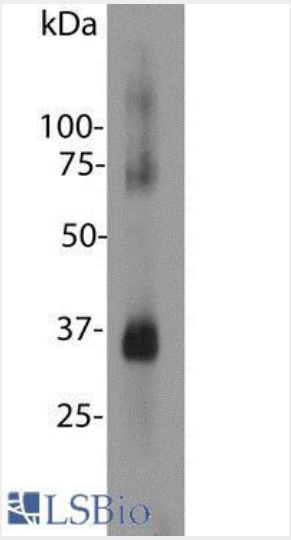
Volume
50 µl

Rhodopsin / RHO Antibody (clone A531) - Protocols

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

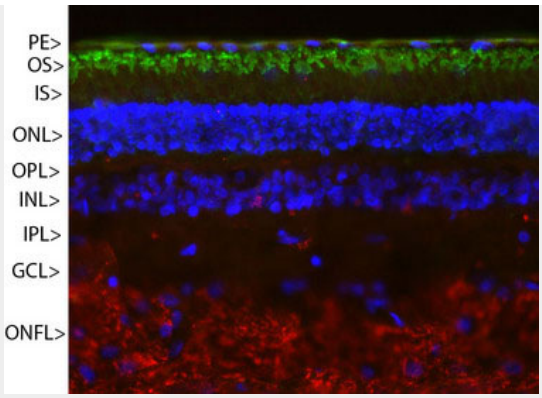
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Rhodopsin / RHO Antibody (clone A531) - Images



Blot of bovine retinal extracts probed with Rhodopsin / RHO antibody.

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Pig retinal section stained with Rhodopsin / RHO antibody (green) and counterstained with rabbit...

Rhodopsin / RHO Antibody (clone A531) - 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 (clone A531) - 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).