

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](http://www.uniprot.org/citations/8107847), PubMed:[7846071](http://www.uniprot.org/citations/7846071)). Required for photoreceptor cell viability after birth (PubMed:[2215617](http://www.uniprot.org/citations/2215617), PubMed:[12566452](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/8107847), PubMed:[28524165](http://www.uniprot.org/citations/28524165), PubMed:[26200343](http://www.uniprot.org/citations/26200343), PubMed:[28753425](http://www.uniprot.org/citations/28753425)). Subsequent receptor phosphorylation mediates displacement of the bound G-protein alpha subunit by the arrestin SAG and terminates signaling (PubMed:[28753425](#)).

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

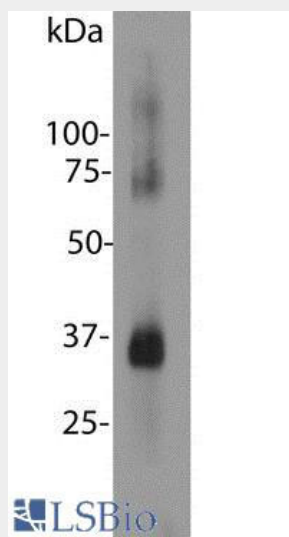
Volume

50 µl

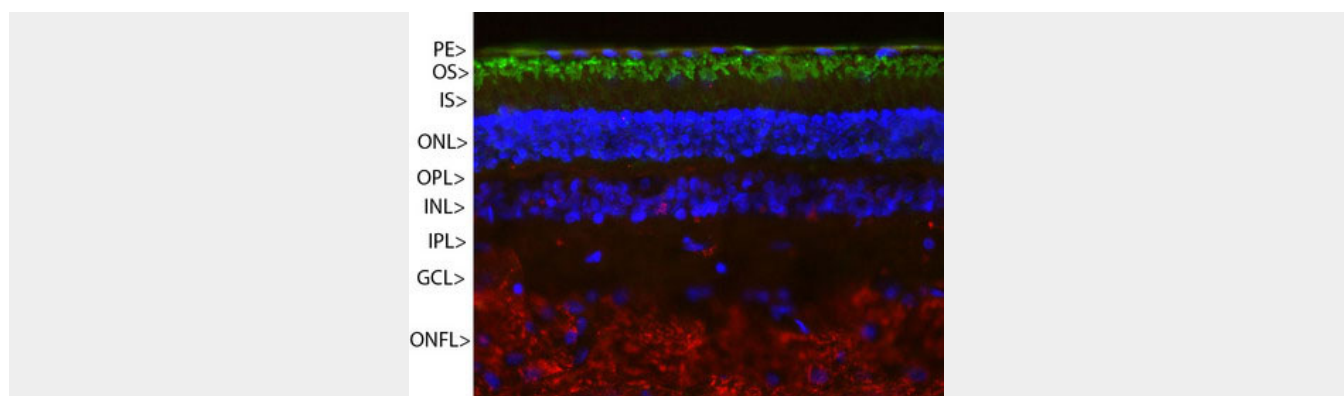
Rhodopsin / RHO Antibody (clone A531) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Rhodopsin / RHO Antibody (clone A531) - Images

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



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