10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Rhodopsin Antibody

Our Anti-Rhodopsin primary antibody from PhosphoSolutions is mouse monoclonal. It detects amphibians

Catalog # AN1543

Specification

Anti-Rhodopsin Antibody - Product Information

Application	**WB**
Primary Accession	P02699
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**39008**

Anti-Rhodopsin Antibody - Additional Information

Gene ID	**509933**

Other Names

CSNBAD1 antibody, MGC138309 antibody, MGC138311 antibody, OPN 2 antibody, OPN2 antibody, opsd antibody, OPSD_HUMAN antibody, opsin 2 antibody, Opsin 2 rod pigment antibody, Opsin-2 antibody, Opsin2 antibody, Retinitis Pigmentosa 4 antibody, Retinitis pigmentosa 4 autosomal dominant antibody, RHO antibody, Rhodopsin antibody, RP 4 antibody, RP4 antibody

Target/Specificity

Rhodopsin is a photoreceptor protein found in retinal rods. It is a complex formed by the binding of retinaldehyde, the oxidized form of retinol, to the protein opsin and undergoes a series of complex reactions in response to visible light resulting in the transmission of nerve impulses to the brain. Mutation of the rhodopsin gene is a major contributor to various retinopathies such as retinitis pigmentosa. The disease-causing protein generally aggregates with ubiquitin in inclusion bodies, disrupts the intermediate filament network and impairs the ability of the cell to degrade non-functioning proteins which leads to photoreceptor apoptosis (Berson et al., 1991). Other mutations on rhodopsin lead to X-linked congenital stationary night blindness, mainly due to constitutive activation, when the mutations occur around the chromophore binding pocket of rhodopsin (Dryja et al.,1993). Several other pathological states relating to rhodopsin have been discovered including poor post-Golgi trafficking, dysregulative activation, rod outer segment instability and arrestin binding.

Dilution

WB~~1:1000

Format

Protein G Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Rhodopsin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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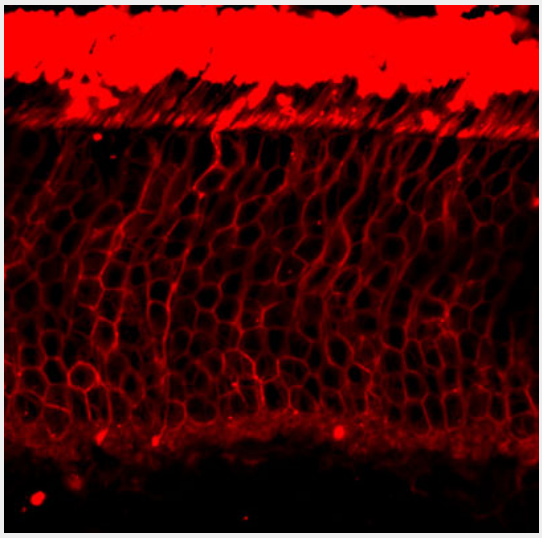
Shipping
Blue Ice

Anti-Rhodopsin Antibody - Protocols

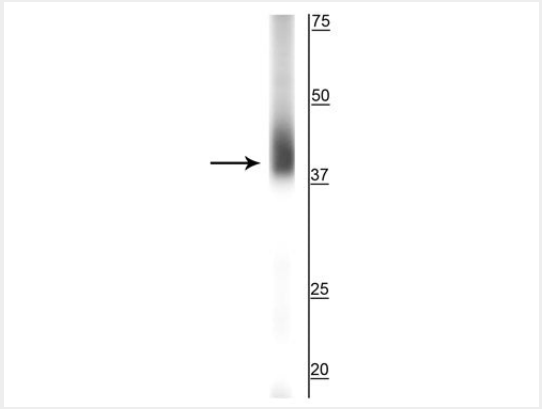
Provided below are standard protocols that you may find useful for product applications.

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

Anti-Rhodopsin Antibody - Images



Immunofluorescence of mouse retinal section showing specific immunolabeling of the rhodopsin protein(cat. 1840-RHO, red, 1:100) in the rod spherules. Photo courtesy Mary Raven, University of California, Santa Barbara, CA.



Western blot of rat retina showing specific labeling of the ~39 kDa rhodopsin protein.

Anti-Rhodopsin Antibody - Background

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