**Product Name: Rhodopsin (phospho Ser334) Rabbit Polyclonal Antibody**
**Catalog #: APRab05370**

## Summary

| | |
|---|---|
| **Production Name** | Rhodopsin (phospho Ser334) Rabbit Polyclonal Antibody |
| **Description** | Rabbit Polyclonal Antibody |
| **Host** | Rabbit |
| **Application** | IHC,ELISA |
| **Reactivity** | Human,Mouse,Rat |

## Performance

| | |
|---|---|
| **Conjugation** | Unconjugated |
| **Modification** | Phospho Antibody |
| **Isotype** | IgG |
| **Clonality** | Polyclonal |
| **Form** | Liquid |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| **Buffer** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N. |
| **Purification** | Affinity purification |

## Immunogen

| | |
|---|---|
| **Gene Name** | RHO |
| **Alternative Names** | RHO; OPN2; Rhodopsin; Opsin-2 |
| **Gene ID** | 6010.0 |
| **SwissProt ID** | P08100.The antiserum was produced against synthesized peptide derived from human Rhodopsin around the phosphorylation site of Ser334. AA range:299-348 |

## Application

| | |
|---|---|
| **Dilution Ratio** | IHC 1:100 - 1:300. ELISA: 1:10000.. |
| **Molecular Weight** | |

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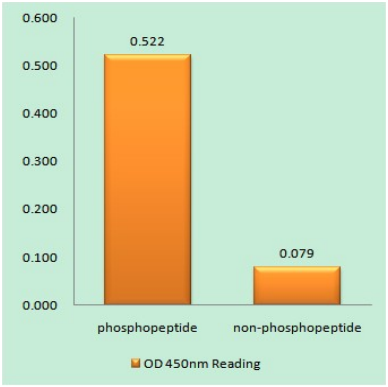
## Background

Retinitis pigmentosa is an inherited progressive disease which is a major cause of blindness in western communities. It can be inherited as an autosomal dominant, autosomal recessive, or X-linked recessive disorder. In the autosomal dominant form,which comprises about 25% of total cases, approximately 30% of families have mutations in the gene encoding the rod photoreceptor-specific protein rhodopsin. This is the transmembrane protein which, when photoexcited, initiates the visual transduction cascade. Defects in this gene are also one of the causes of congenital stationary night blindness. [provided by RefSeq, Jul 2008],disease:Defects in RHO are a cause of retinitis pigmentosa autosomal recessive (ARRP) [MIM:268000].,disease:Defects in RHO are the cause of congenital stationary night blindness autosomal dominant type 1 (CSNBAD1) [MIM:610445]; also known as rhodopsin-related congenital stationary night blindness. Congenital stationary night blindness is a non-progressive retinal disorder characterized by impaired night vision.,disease:Defects in RHO are the cause of retinitis pigmentosa type 4 (RP4) [MIM:180380]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well. RP4 inheritance is autosomal dominant.,function: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.,online information:Retina International's Scientific Newsletter,online information:Rhodopsin entry,online information:Rhodopsin mutations page,PTM:Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region.,similarity:Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.,tissue specificity:Rod shaped photoreceptor cells which mediates vision in dim light.,

## Research Area

Regulation of Microtubule Dynamics; Regulation of Actin Dynamics; SAPK_JNK; B_Cell_Antigen

## Image Data




Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Rhodopsin (Phospho-Ser334) Antibody

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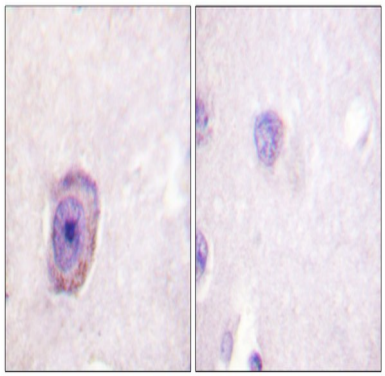

Immunohistochemistry analysis of paraffin-embedded human brain, using Rhodopsin （Phospho-Ser334） Antibody. The picture on the right is blocked with the phospho peptide.

## Note

For research use only.