

Rabbit Anti-phospho-Rhodopsin (Ser334) antibody

SL19873R

Product Name:	phospho-Rhodopsin (Ser334)
Chinese Name:	磷酸化视网膜色素变性蛋白4抗体
Alias:	Rhodopsin (phospho S334); p-Rhodopsin (phospho S334); CSNBAD1; MGC138309; MGC138311; OPN 2; OPN2; opsd; OPSD_HUMAN; Opsin 2; opsin 2; Opsin 2 rod pigment; Opsin-2; Opsin2; Retinitis Pigmentosa 4; Retinitis pigmentosa 4 autosomal dominant; RHO; Rhodopsin; RP 4; RP4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Rat,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	39kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human Rhodopsin around the phosphorylation site of Ser334:EA(p-S)AT
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

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]

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.

Subcellular Location:

Membrane. Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to the rod outer segment (OS) photosensory cilia.

Tissue Specificity:

Rod shaped photoreceptor cells which mediates vision in dim light.

Product Detail:

Post-translational modifications:

Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region.

Contains one covalently linked retinal chromophore.

DISEASE:

Retinitis pigmentosa 4.

Night blindness, congenital stationary, autosomal dominant 1

Similarity:

Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.

SWISS:

P08100

Gene ID:

6010

Database links:

Entrez Gene: 6010 Human

Entrez Gene: 212541 Mouse

Entrez Gene: 24717 Rat

Omim: 180380 Human

SwissProt: P08100 Human

SwissProt: P15409 Mouse

SwissProt: P51489 Rat

Unigene: 247565 Human

<u>Unigene: 2965</u> Mouse

Unigene: 406156 Mouse

Unigene: 92530 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.