



Rabbit Anti-Rhodopsin/RP4/RHO antibody

SL19872R

Product Name:	Rhodopsin/RP4/RHO
Chinese Name:	视网膜色素变性蛋白4抗体
Alias:	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,Mouse,Rat,Dog,Cow,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 synthetic peptide derived from human Rhodopsin/RP4/RHO:301-348/348
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
Product Detail:	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.

Post-translational modifications:

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

DISEASE:

Retinitis pigmentosa 4.

Night blindness, congenital stationary, autosomal dominant 1.

Similarity:

Belongs to the G-protein coupled receptor 1 family. Opsin subfamily. Contains one covalently linked retinal chromophore.

SWISS:

P08100

Gene ID:

6010

Database links:

[Entrez Gene: 509933](#) Cow

[Entrez Gene: 493763](#) Dog

[Entrez Gene: 6010](#) Human

[Entrez Gene: 212541](#) Mouse

[Entrez Gene: 24717](#) Rat

[Omim: 180380](#) Human

[SwissProt: Q95KU1](#) Cat

[SwissProt: P28681](#) Chinese Hamster

[SwissProt: P02699](#) Cow

[SwissProt: P32308](#) Dog

[SwissProt: P08100](#) Human

[SwissProt: P15409](#) Mouse

[SwissProt: P49912](#) Rabbit

[SwissProt: P51489](#) Rat

[Unigene: 247565](#) Human

[Unigene: 2965](#) 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.