

Rhodopsin Antibody

Rabbit mAb Catalog # AP91190

Product Information

Application WB, IHC
Primary Accession P08100
Reactivity Rat, Human
Clonality Monoclonal

Other Names CSNBAD1; OPN2; opsd; Opsin 2 rod pigment; Opsin2; Retinitis pigmentosa 4

autosomal dominant; RHO; Rhodopsin; RP4;

IsotypeRabbit IgGHostRabbitCalculated MW38893

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human Rhodopsin

DescriptionPhotoreceptor required for image-forming vision at low light intensity.

Paguired for photoreceptor cell viability after birth Light induced.

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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name RHO

Synonyms OPN2

Function Photoreceptor required for image-forming vision at low light intensity

(PubMed:<u>7846071</u>, PubMed:<u>8107847</u>). Required for photoreceptor cell viability after birth (PubMed:<u>12566452</u>, PubMed:<u>2215617</u>). Light- induced isomerization of the chromophore 11-cis-retinal to all-trans- retinal triggers a

conformational change that activates signaling via G-proteins (PubMed: 26200343, PubMed: 28524165, PubMed: 28753425,

PubMed:<u>8107847</u>). Subsequent receptor phosphorylation mediates

displacement of the bound G-protein alpha subunit by the arrestin SAG and

terminates signaling (PubMed:26200343, PubMed:28524165).

Cellular Location Membrane; Multi-pass membrane protein. Cell projection, cilium,

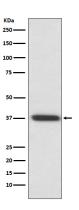
photoreceptor outer segment. Note=Synthesized in the inner segment (IS) of

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

Images



Western blot analysis of Rhodopsin expression in rat eyeball lysate.

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