

Rhodopsin Polyclonal Antibody

Catalog # AP72269

Product Information

Application	WB
Primary Accession	P08100
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38893

Additional Information

Gene ID	6010
Other Names	RHO; OPN2; Rhodopsin; Opsin-2
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	RHO
Synonyms	OPN2
Function	Photoreceptor required for image-forming vision at low light intensity (PubMed: 7846071 , PubMed: 8107847). Required for photoreceptor cell viability after birth (PubMed: 12566452 , PubMed: 2215617). 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: 8107847). 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

Background

Photoreceptor required for image-forming vision at low light intensity (PubMed: [8107847](#), PubMed:[7846071](#)). Required for photoreceptor cell viability after birth (PubMed:[2215617](#), PubMed:[12566452](#)). Light-induced isomerization of the chromophore 11-cis-retinal to all-trans-retinal triggers a conformational change that activates signaling via G-proteins (PubMed:[8107847](#), PubMed:[28524165](#), PubMed:[26200343](#), PubMed:[28753425](#)). Subsequent receptor phosphorylation mediates displacement of the bound G- protein alpha subunit by the arrestin SAG and terminates signaling (PubMed:[28524165](#), PubMed:[26200343](#)).

Images



Western Blot analysis of various cells using Rhodopsin Polyclonal Antibody

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