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Anti-Rhodopsin (Phospho-S334) Antibody

Catalog # AP61446

Product Information

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

Additional Information

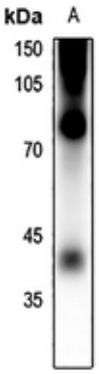
Gene ID	6010
Other Names	OPN2; Rhodopsin; Opsin-2
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S334 of human Rhodopsin protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

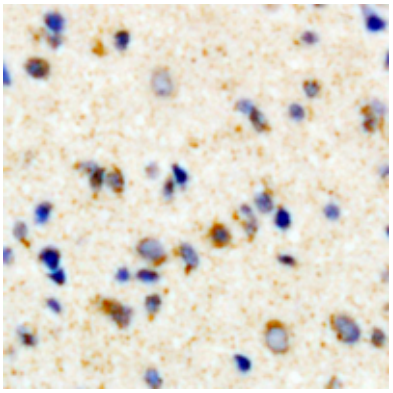
Name	RHO (HGNC:10012)
Synonyms	OPN2
Function	G protein-coupled photoreceptor that activates the G protein transducin (t) signaling pathway in response to light and is essential for image-forming vision under low-light conditions (PubMed:6140680, PubMed:7846071, PubMed:8107847). Required for postnatal photoreceptor cell viability (PubMed:12566452, PubMed:2215617). Activation occurs when the covalently bound 11-cis-retinal chromophore absorbs a photon and isomerizes to all-trans-retinal, inducing a conformational change in the opsin that triggers G protein-mediated phototransduction (Probable) (PubMed:26200343, PubMed:28753425, PubMed:8107847). Signal termination occurs via receptor phosphorylation, which promotes binding of arrestin (SAG) and displacement of the G protein alpha subunit (Probable) (PubMed:26200343).
Cellular Location	Photoreceptor outer segment membrane; Multi-pass membrane protein.

	Membrane; Multi-pass membrane protein 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 (Phospho-S334) expression in mouse eyes (A) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 37; 75; 150 kD)



Immunohistochemical analysis of Rhodopsin (Phospho-S334) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.