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Neuropsin Polyclonal Antibody

Catalog # AP71259

Product Information

Application	WB, E, IHC-P
Primary Accession	Q6U736
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39727

Additional Information

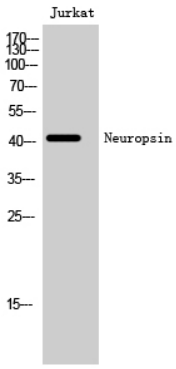
Gene ID	221391
Other Names	OPN5; GPR136; PGR12; TMEM13; Opsin-5; G-protein coupled receptor 136; G-protein coupled receptor PGR12; Neuropsin; Transmembrane protein 13
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications. E~~N/A IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	OPN5 (HGNC:19992)
Synonyms	GPR136, PGR12, TMEM13
Function	G protein-coupled photoreceptor that selectively activates G(i) protein in response to light in the retina (By similarity). Activation occurs when the opsin-bound cis-retinal chromophore absorbs a photon and isomerizes to all-trans-retinal, inducing a conformational change in the opsin that triggers a G protein-mediated phototransduction cascade (PubMed:22043319). Acts as a bistable protein with absorption peaks at 380 nm (UVA light) and 470 nm (blue light), allowing photoreversible regeneration of the cis-retinal chromophore after stimulation (PubMed:22043319). Required for the light-response in the inner plexiform layer, and contributes to the regulation of the light-response in the nerve fiber layer, via phosphorylated DAT/SLC6A3 dopamine uptake. Involved in local corneal and retinal circadian rhythm photoentrainment via modulation of the UVA light-induced phase-shift of the retina clock. Acts as a circadian photoreceptor in the outer ear and vibrissal pads, via modulation of circadian clock-gene expression in response to violet light during the light-to-dark transition phase and night phase of the circadian

	cycle. Required in the retina to negatively regulate hyaloid vessel regression during postnatal development via light-dependent OPN5-SLC32A1-DRD2-VEGFR2 signaling. Involved in the light-dependent regulation of retina and vitreous compartment dopamine levels. Mediates violet light-accelerated wound healing in corneas, being transiently expressed following physical injury (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q6VZZ7}; Multi-pass membrane protein
Tissue Location	Detected in brain and retina and cell lines derived from neural retina.

Images



Western Blot analysis of Jurkat cells using Neuropsin Polyclonal Antibody

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