Anti-Human OPN4 Polyclonal Antibody

Polyclonal Antibody

Cat.NO.: PA04932

3th Edition

Description: Opsins are members of the guanine nucleotide-binding protein (G protein)-coupled receptor superfamily. This gene encodes a photoreceptive opsin protein that is expressed within the ganglion and amacrine cell layers of the retina. In mouse, retinal ganglion cell axons expressing this gene projected to the suprachiasmatic nucleus and other brain nuclei involved in circadian photoentrainment. In mouse, this protein is coupled to a transient receptor potential (TRP) ion channel through a G protein signaling pathway and produces a physiologic light response via membrane depolarization and increased intracellular calcium. The protein functions as a sensory photopigment and may also have photoisomerase activity. Experiments with knockout mice indicate that this gene attenuates, but does not abolish, photoentrainment. Alternative splicing results in multiple transcript variants encoding different isoforms. OPN4 (Opsin 4) is a Protein Coding gene. Diseases associated with OPN4 include Borderline Glaucoma and Retinitis Pigmentosa 29. Among its related pathways are RET signaling and Circadian rythm related genes. GO annotations related to this gene include G-protein coupled receptor activity and G-protein coupled photoreceptor activity. An important paralog of this gene is OPN3.

Antigen: Synthesized peptide derived from the C-terminal region of human Melanopsin

Form:

How to use:1.0 ml distilled water will be added to the product

Stability: Lyophilized product, 5 years at 2 – 8°C; Solution, 2 years at –20°C

Dilution:PBS (pH7.4) containing 1% BSA

Application: This antibody can be used for western blotting in concentration of 1?5?g/ml.

Specificity: Eye. Expression is restricted within the ganglion and amacrine cell layers of the retina.