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OPN1MW antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14458

Product Information

Application	WB
Primary Accession	P04000
Other Accession	NM_000513, NP_000504
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40574

Additional Information

Gene ID	5956
Alias Symbol	CBBM, CBD, GCP, MGC176615, MGC177321, MGC198468, MGC198469, OPN1MW1, OPN1MW2, GOP, COD5
Other Names	Long-wave-sensitive opsin 1, Red cone photoreceptor pigment, Red-sensitive opsin, ROP, OPN1LW, RCP
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-OPN1MW antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	OPN1MW antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

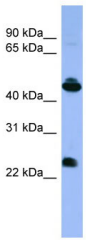
Name	OPN1LW (HGNC:9936)
Synonyms	RCP
Function	G protein-coupled photoreceptor that selectively activates transducin G alpha protein (G(t)) in response to long-wavelength (red) light (PubMed:21314100, PubMed:2937147, PubMed:6140680). This activation leads to increased cGMP phosphodiesterase activity, resulting in decreased intracellular cGMP and subsequent closure of cGMP-gated ion channels (PubMed:21314100, PubMed:2937147, PubMed:6140680). The process is initiated 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 the G protein-mediated phototransduction cascade (PubMed:21314100, PubMed:2937147, PubMed:6140680). Mediates visual perception of red light in cone photoreceptor cells (PubMed:12051694, PubMed:8213841, PubMed:8666378).
Cellular Location	Membrane; Multi-pass membrane protein. Photoreceptor outer segment membrane {ECO:0000250|UniProtKB:Q9W6A7}; Multi-pass membrane protein
Tissue Location	The red (OPN1LW), green (OPN1MW), and blue (OPN1SW) photoreceptor pigments are found in cone cells

References

Nathans J.,et al.Science 232:193-202(1986).
Ross M.T.,et al.Nature 434:325-337(2005).
Applebury M.L.,et al.Vision Res. 26:1881-1895(1986).
Winderickx J.,et al.Nature 356:431-433(1992).
Nathans J.,et al.Am. J. Hum. Genet. 53:987-1000(1993).

Images



WB Suggested Anti-OPN1MW Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: HepG2 cell lysate

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