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(DANRE) opn1sw2 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # Azb21565b

Product Information

Application	WB, E
Primary Accession	Q9W6A8
Reactivity	Zebrafish
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52986
Calculated MW	39484

Additional Information

Gene ID	30435
Other Names	Opsin-1, short-wave-sensitive 2, Blue cone photoreceptor pigment, Blue-sensitive opsin, Opsin SWS-2, opn1sw2, bluops, opn1sw1, sws2
Target/Specificity	This DANRE opn1sw2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 242-276 amino acids of DANRE opn1sw2.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	(DANRE) opn1sw2 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	opn1sw2
Synonyms	bluops, opn1sw1, sws2
Function	G protein-coupled photoreceptor that selectively activates transducin G alpha protein (G(t)) in response to short-wavelength (blue-violet) light, thereby stimulating the G(t)/transducin protein pathway (By similarity). This activation

	leads to increased cGMP phosphodiesterase activity, resulting in decreased intracellular cGMP and subsequent closure of cGMP-gated ion channels (By similarity). 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 (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P03999}; Multi-pass membrane protein
Tissue Location	Retinal long single cone outer segments.

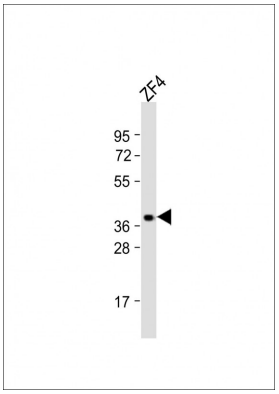
Background

Visual pigments are the light-absorbing molecules that mediate vision. They consist of an apoprotein, opsin, covalently linked to cis-retinal.

References

Vihtelic T.S.,et al.Vis. Neurosci. 16:571-585(1999).
Chinen A.,et al.Genetics 163:663-675(2003).
Howe K.,et al.Nature 496:498-503(2013).

Images



Anti-opn1sw2 Antibody (C-Term)at 1:2000 dilution + ZF4 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Disrupted Copper Homeostasis and Impaired Retinal Development Caused by slc6a4a Deficiency in Zebrafish.
- Deficiency of copper responsive gene stmn4 induces retinal developmental defects
- Silver nanoparticles affect lens rather than retina development in zebrafish embryos.

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