10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CNGB1 Antibody
Rabbit polyclonal antibody to CNGB1
Catalog # AP59988

Specification

Anti-CNGB1 Antibody - Product Information

Application	**WB**
Primary Accession	Q14028
Reactivity	**Human, Mouse, Rat, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**139678**

Anti-CNGB1 Antibody - Additional Information

Gene ID 1258

Other Names
CNCG2; CNCG3L; CNCG4; RCNC2; Cyclic nucleotide-gated cation channel beta-1; Cyclic nucleotide-gated cation channel 4; CNG channel 4; CNG-4; CNG4; Cyclic nucleotide-gated cation channel gamma; Cyclic nucleotide-gated cation channel modulatory subunit; Cyclic nucleotide-gated channel beta-1; CNG channel beta-1; Glutamic acid-rich protein; GARP

Target/Specificity
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CNGB1. The exact sequence is proprietary.

Dilution
WB~~WB (1/500 - 1/1000)

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-CNGB1 Antibody - Protein Information

Name CNGB1 {ECO:0000303|PubMed:34699778}

Function
Pore-forming subunit of the rod cyclic nucleotide-gated channel. Mediates rod photoresponses at dim light converting transient changes in intracellular cGMP levels into electrical signals. In the dark, cGMP levels are high and keep the channel open enabling a steady inward current carried by Na(+) and Ca(2+) ions that leads to membrane depolarization and neurotransmitter release from synaptic terminals. Upon photon absorption cGMP levels decline leading to channel closure and membrane hyperpolarization that ultimately slows neurotransmitter release and signals the

presence of light, the end point of the phototransduction cascade (By similarity) (PubMed:34699778). Pore-forming subunit of the olfactory cyclic nucleotide-gated channel. Operates in the cilia of olfactory sensory neurons where chemical stimulation of the odorant is converted to an electrical signal. Mediates odorant-induced cAMP-dependent Ca(2+) influx triggering neuron depolarization. The rise of intracellular Ca(2+) levels potentiates the olfactory response by activating Ca(2+)-dependent Cl(-) channels, but it also serves as a negative feedback signal to desensitize the channel for rapid adaptation to odorants (By similarity). Conducts cGMP- and cAMP-gated ion currents, with permeability for monovalent and divalent cations. The selectivity for Ca(2+) over Na(+) increases with cGMP concentrations, whereas the selectivity among monovalent ions is independent of the cGMP levels (By similarity) (PubMed:34699778).

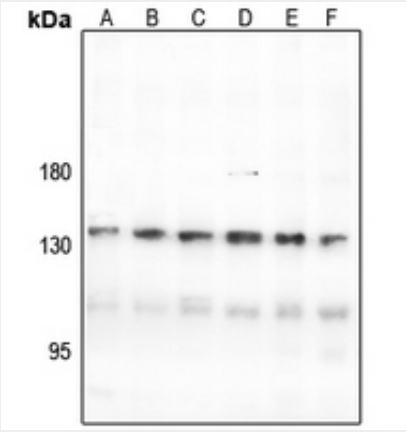
Cellular Location
Cell membrane {ECO:0000250|UniProtKB:A0A8I5ZN27}; Multi-pass membrane protein. Cell projection, cilium membrane {ECO:0000250|UniProtKB:A0A8I5ZN27, ECO:0000250|UniProtKB:E1AZ71}; Multi-pass membrane protein

Anti-CNGB1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CNGB1 Antibody - Images



Western blot analysis of CNGB1 expression in CT26 (A), HCT116 (B), A375 (C), LO2 (D), MCF7 (E), K562 (F) whole cell lysates.

Anti-CNGB1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CNGB1. The exact sequence is proprietary.