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CNGA2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51097

Product Information

Application	WB
Primary Accession	Q16280
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76048

Additional Information

Gene ID	1260
Other Names	Cyclic nucleotide-gated olfactory channel, Cyclic nucleotide-gated cation channel 2, Cyclic nucleotide-gated channel alpha-2, CNG channel alpha-2, CNG-2, CNG2, CNGA2, CNCA, CNCA1, CNCG2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CNGA2. The exact sequence is proprietary.
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	CNGA2 {ECO:0000303|PubMed:11764791, ECO:0000312|HGNC:HGNC:2149}
Function	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. Conducts cAMP- and cGMP-gated ion currents, with permeability for monovalent and divalent cations.
Cellular Location	Cell projection, cilium membrane {ECO:0000250|UniProtKB:Q00195}; Multi-pass membrane protein

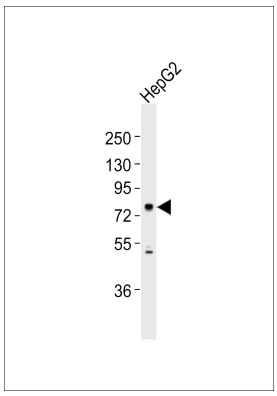
Background

Odorant signal transduction is probably mediated by a G- protein coupled cascade using cAMP as second messenger. The olfactory channel can be shown to be activated by cyclic nucleotides which leads to a depolarization of olfactory sensory neurons.

References

Distler M.,et al.Neuropharmacology 33:1275-1282(1994).
Sjoeblom T.,et al.Science 314:268-274(2006).

Images



Anti-CNGA2 Antibodyat 1:1000 dilution + HepG2 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 : 76 kDa Blocking/Dilution buffer: 5% NFDM/TBST.