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CNG-2 Polyclonal Antibody

Catalog # AP69180

Product Information

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

Additional Information

Gene ID	1260
Other Names	CNGA2; CNCA; CNCA1; CNCG2; Cyclic nucleotide-gated olfactory channel; Cyclic nucleotide-gated cation channel 2; Cyclic nucleotide-gated channel alpha-2; CNG channel alpha-2; CNG-2; CNG2
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

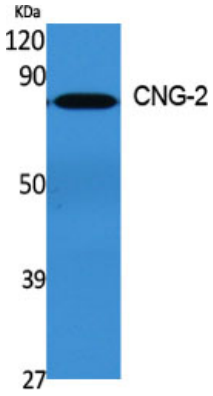
Protein Information

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. Also expressed in a subpopulation of sensory neurons of the main olfactory epithelium (type B cells), where it mediates Ca(2+) influx in response to hydrogen sulfide, and is required for defensive behavioral responses to this stimulus (By similarity).
Cellular Location	Cell projection, cilium membrane {ECO:0000250|UniProtKB:Q00195}; Multi-pass membrane protein

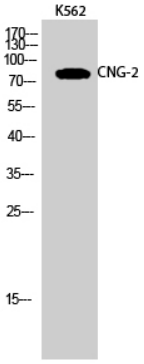
Background

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.

Images



Western Blot analysis of various cells using CNG-2 Polyclonal Antibody



Western Blot analysis of K562 cells using CNG-2 Polyclonal Antibody

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