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CNGA4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11811a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8IV77
Other Accession	NP_001032406.1
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB29600
Calculated MW	65999
Antigen Region	131-160

Additional Information

Gene ID	1262
Other Names	Cyclic nucleotide-gated cation channel alpha-4, Cyclic nucleotide-gated channel alpha-4, CNG channel alpha-4, CNG-4, CNG4, CNGA4
Target/Specificity	This CNGA4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 131-160 amino acids from the N-terminal region of human CNGA4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	CNGA4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CNGA4 {ECO:0000303|PubMed:11764791, ECO:0000312|HGNC:HGNC:2152}
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:Q64359}; Multi-pass membrane protein

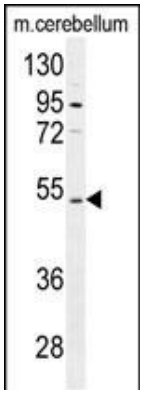
Background

CNGA4 is a modulatory subunit of vertebrate cyclic nucleotide-gated membrane channels that transduce odorant signals (Munger et al., 2001 [PubMed 11739959]).

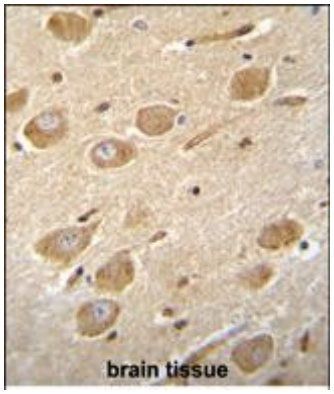
References

Hofmann, F., et al. Pharmacol. Rev. 57(4):455-462(2005)
Kelliher, K.R., et al. Proc. Natl. Acad. Sci. U.S.A. 100(7):4299-4304(2003)
Bradley, J., et al. Science 294(5549):2095-2096(2001)
Munger, S.D., et al. Science 294(5549):2172-2175(2001)

Images



CNGA4 Antibody (N-term) (Cat. #AP11811a) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the CNGA4 antibody detected the CNGA4 protein (arrow).



CNGA4 Antibody (N-term) (Cat. #AP11811a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of CNGA4 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.