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ACCN2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9270b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P78348
Other Accession	P55926, Q6NXK8, Q1XA76
Reactivity	Human
Predicted	Mouse, Rat, Chicken, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22610
Calculated MW	59909
Antigen Region	500-526

Additional Information

Gene ID	41
Other Names	Acid-sensing ion channel 1, ASIC1, Amiloride-sensitive cation channel 2, neuronal, Brain sodium channel 2, BNaC2, ASIC1, ACCN2, BNAC2
Target/Specificity	This ACCN2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 500-526 amino acids from the C-terminal region of human ACCN2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	ACCN2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ASIC1 (HGNC:100)
Function	Forms voltage-independent, pH-gated trimeric sodium channels that act as

	postsynaptic excitatory receptors in the nervous system, playing a crucial role in regulating synaptic plasticity, learning, and memory (PubMed:21036899, PubMed:32915133, PubMed:34319232). Upon extracellular pH drop this channel elicits transient, fast activating, and completely desensitizing inward currents (PubMed:21036899). Displays high selectivity for sodium ions but can also permit the permeation of other cations (PubMed:21036899). Regulates more or less directly intracellular calcium concentration and CaMKII phosphorylation, and thereby the density of dendritic spines. Modulates neuronal activity in the circuits underlying innate fear (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q6NXK8}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q6NXK8}. Note=Isolated in synaptosomes from the dendritic synapses of neurons {ECO:0000250|UniProtKB:Q6NXK8}
Tissue Location	Expressed in neurons throughout the central and peripheral nervous system.

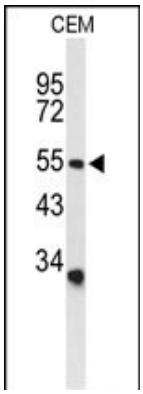
Background

ACCN2 encodes a member of the degenerin/epithelial sodium channel (DEG/ENaC) superfamily. The members of this family are amiloride-sensitive sodium channels that contain intracellular N and C termini, 2 hydrophobic transmembrane regions, and a large extracellular loop, which has many cysteine residues with conserved spacing. The member is expressed in most if not all brain neurons, and it may be an ion channel subunit; however, its function as an ion channel remains unknown.

References

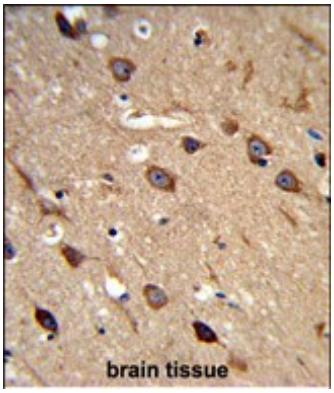
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Kapoor,N., et.al., J. Biol. Chem. 284 (36), 24526-24541 (2009)
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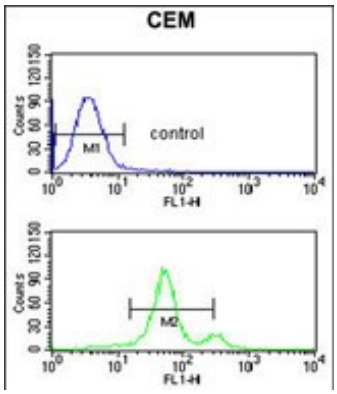
Images



Western blot analysis of ACCN2 Antibody (C-term) (Cat. #AP9270b) in CEM cell line lysates (35ug/lane). ACCN2 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human brain tissue reacted with ACCN2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





ACCN2 Antibody (C-term) (Cat. #AP9270b) flow cytometric analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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