

ACCN2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9270b

Specification

ACCN2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region FC, IHC-P, WB,E <u>P78348</u> <u>P55926</u>, <u>O6NXK8</u>, <u>O1XA76</u> Human Chicken, Mouse, Rat Rabbit Polyclonal Rabbit IgG 59909 500-526

ACCN2 Antibody (C-term) - 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 FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000 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.

ACCN2 Antibody (C-term) - Protein Information



Name ASIC1 (<u>HGNC:100</u>)

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:<u>21036899</u>, PubMed:<u>32915133</u>, PubMed:<u>34319232</u>). Upon extracellular pH drop this channel elicits transient, fast activating, and completely desensitizing inward currents (PubMed:<u>21036899</u>). Displays high selectivity for sodium ions but can also permit the permeation of other cations (PubMed:<u>21036899</u>). 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.

ACCN2 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ACCN2 Antibody (C-term) - Images

CEM 95 72 55 - 4 43 34

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.

ACCN2 Antibody (C-term) - 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.

ACCN2 Antibody (C-term) - References

Sherwood,T., et.al., J. Biol. Chem. 284 (41), 27899-27907 (2009) Kapoor,N., et.al., J. Biol. Chem. 284 (36), 24526-24541 (2009) Samways,D.S., et.al., Cell Calcium 45 (4), 319-325 (2009)