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ACCN1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9213c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q16515
Other Accession	Q62962, Q925H0
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22513
Calculated MW	57709
Antigen Region	120-148

Additional Information

Gene ID	40
Other Names	Acid-sensing ion channel 2, ASIC2, Amiloride-sensitive brain sodium channel, Amiloride-sensitive cation channel 1, neuronal, Amiloride-sensitive cation channel neuronal 1, Brain sodium channel 1, BNC1, BNaC1, Mammalian degenerin homolog, ASIC2, ACCN, ACCN1, BNAC1, MDEG
Target/Specificity	This ACCN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 120-148 amino acids from the Central region of human ACCN1.
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	ACCN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ASIC2 (HGNC:99)

Function	Forms pH-gated trimeric sodium channels that act as postsynaptic excitatory sensors in the nervous system (PubMed:10842183, PubMed:23034652, PubMed:8626462, PubMed:8631835). Upon extracellular acidification, these channels generate rapid, transient inward currents that fully desensitize (PubMed:10842183). Highly selective for sodium, they are permeable to other cations (PubMed:8626462, PubMed:8631835). By forming heterotrimeric channels with ASIC1, could contribute to synaptic plasticity, learning, and memory. Additionally, as acid sensors at nerve terminals, plays a role in mechanosensation and phototransduction (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000269|Ref.10}. Note=Localized at the plasma membrane of neurons, in the soma and punctated peripheral processes {ECO:0000250|UniProtKB:Q925H0}
Tissue Location	Expressed in brain, cerebellum, trigeminal sensory ganglia and also detected in testis.

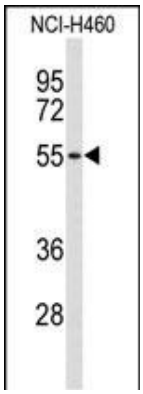
Background

ACCN1 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 encoded by this protein may play a role in neurotransmission. In addition, a heteromeric association between this member and ACCN3 (variant 1) has been observed to co-assemble into proton-gated channels sensitive to gadolinium.

References

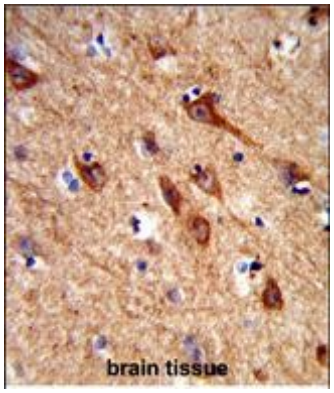
Bashari,E., et.al., Am. J. Physiol., Cell Physiol. 296 (2), C372-C384 (2009)
Chai,S., et.al., J. Biol. Chem. 282 (31), 22668-22677 (2007)

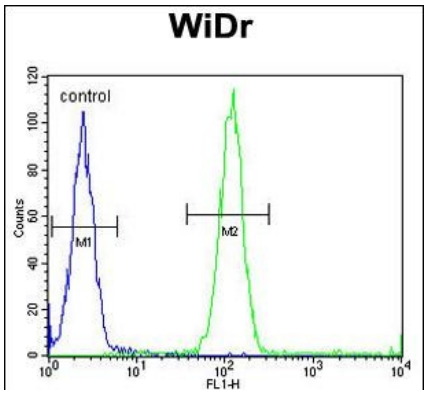
Images



Western blot analysis of ACCN1 Antibody (Center) (Cat. #AP9213c) in NCI-H460 cell line lysates (35ug/lane). ACCN1 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human brain tissue reacted with ACCN1 Antibody (Center), 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.





ACCN1 Antibody (Center) (Cat. #AP9213c) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.