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Anti-ACCN1 Picoband Antibody

Catalog # ABO11664

Product Information

Application	WB
Primary Accession	Q16515
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Acid-sensing ion channel 2(ASIC2) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	57709
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Cell membrane ; Multi-pass membrane protein . Localized at the plasma membrane of neurons, in the soma and punctated peripheral processes. .
Tissue Specificity	Brain and spinal cord. Isoform 1 is also detected in testis, liver, colon and ovary. .
Source	Eukaryota
Protein Name	Acid-sensing ion channel 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ACCN1 (112-147aa ELLALLDVNLQIPDPHLADPSVLEALRQKANFKHYK), different from the related mouse and rat sequences by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

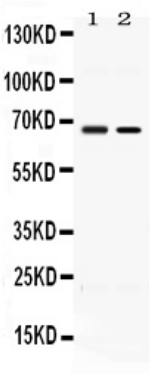
Protein Information

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

Amiloride-sensitive cation channel 1, neuronal, also known as ASIC2, is a protein that in humans is encoded by the ACCN1 gene. This gene 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 gene may play a role in neurotransmission. In addition, a heteromeric association between this member and acid-sensing (proton-gated) ion channel 3 has been observed to co-assemble into proton-gated channels sensitive to gadolinium. Alternative splicing has been observed at this locus and two variants, encoding distinct isoforms, have been identified.

Images



Western blot analysis of ACCN1 expression in rat testis extract (lane 1) and MCF-7 whole cell lysates (lane 2). ACCN1 at 65KD was detected using rabbit anti- ACCN1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11664) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

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