

Anti-ACCN1 Picoband Antibody

Catalog # ABO11664

Specification

Anti-ACCN1 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionQ16515HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionPabbit IgG polyclonal antibody for Acid consing ion channel 2(AS)

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.

Anti-ACCN1 Picoband Antibody - 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 MW KDa

Application Details Western blot, 0.1-0.5 μg/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. .

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.

Anti-ACCN1 Picoband Antibody - Protein Information

Name ASIC2 (HGNC:99)

Function

Forms pH-gated trimeric sodium channels that act as postsynaptic excitatory sensors in the nervous system (PubMed:<a href="http://www.uniprot.org/citations/10842183"

target="_blank">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.

Anti-ACCN1 Picoband Antibody - Protocols

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

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



Anti-ACCN1 Picoband Antibody - 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 .

Anti-ACCN1 Picoband Antibody - 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.