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ACCN1 Rabbit pAb

Catalog # AP98765

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q16515
Other Accession	Q16515
Reactivity	Rat, Human
Predicted	Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57709
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ACCN1
Epitope Specificity	301-400/512
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the amiloride-sensitive sodium channel (TC 1.A.6) family. ACCN1 subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Degenerin/epithelial sodium channel (DEG/ENaC) superfamily members are amiloride-sensitive sodium channels that contain intracellular N- and C-termini, 2 two hydrophobic transmembrane regions and a cysteine-containing extracellular loop. Acid sensing ion channel ASIC1, also designated ACCN2, BNAC2 and ASIC1a, is present in brain as a 4.3-kb transcript with localization to rat dorsal root ganglia. In situ hybridization of rat brain suggests that ASIC1 is most abundant in the main olfactory bulb, cerebral cortex, hippocampal formation, habenula, basolateral amygdaloid nuclei and cerebellum. ASIC1 and H+-gated currents may contribute to the development of fear and anxiety. ASIC2, also designated amiloride-sensitive cation channel 1, neuronal (ACCN1), mammalian degenerin, BNAC1 (MDEG) and brain Na+ channel 1, mediates the normal detection of light touch. ASIC2 mRNA is abundant in brain, specifically in neurons. ASIC2 is expressed as 2.7- and 3.7-kb transcripts in brain and spinal cord tissues. ASIC3, also designated ASIC3, SLNAC1 and TNaC1, mediates detection of lasting pH changes and is involved in modulating moderate- to high-intensity pain sensation. ASIC4, also designated ACCN4 and BNAC4, is abundant in pituitary gland and is also present in the inner ear.

Additional Information

Gene ID	40
Other Names	ACCN; ACCN1; ASIC2a; BNC1; BNaC1; MDEG; hBNaC1; ACIC2; BNaC1a; BNC1k; MDEG1; MDEG2; ASIC2_HUMAN; ASIC2; Amiloride-sensitive cation channel 1,

	neuronal; Amiloride-sensitive cation channel neuronal 1; Brain sodium channel 1 (BNC1 | BNaC1); Mammalian degenerin homolog (MDEG); ASIC2_MOUSE; ASIC2_RAT; Amiloride-sensitive brain sodium channel; Amiloride-sensitive brain sodium channel 2; acid sensing ion channel subunit 2; acid-sensing (proton-gated) ion channel 2; degenerin; brain Na+ channel-1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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