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ASIC3 Rabbit pAb

Catalog # AP98056

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9UHC3
Other Accession	Q9UHC3
Predicted	Rat, Pig, Human, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58905
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ASIC3
Epitope Specificity	342-420/531
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. ACCN3 subfamily.
SUBUNIT	Homotrimer or heterotrimer with other ASIC proteins (By similarity). Interacts with STOM and DLG4 (By similarity). Interacts with LIN7B, MAGI1/BAIAP1, GOPC and ASIC2.
Post-translational modifications	Phosphorylated by PKA. Phosphorylated by PKC. In vitro, PRKCABP/PICK-1 is necessary for PKC phosphorylation and activation of a ACCN3/ASIC3-ACCN1/ASIC2b channel, but does not activate a homomeric ACCN3 channel.
DISEASE	Expressed in fetal tissues, expression increases in lung and kidney adult tissues.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Cation channel with high affinity for sodium, which is gated by extracellular protons and inhibited by the diuretic amiloride. Generates a biphasic current with a fast inactivating and a slow sustained phase. In sensory neurons is proposed to mediate the pain induced by acidosis that occurs in ischemic, damaged or inflamed tissue. May be involved in hyperalgesia. May play a role in mechanoreception. Heteromeric channel assembly seems to modulate channel properties.

Additional Information

Gene ID	9311
Other Names	ACCN3; DRASIC; SLNAC1; TNaC1; ASIC3_HUMAN; ASIC3; hASIC3; Amiloride-sensitive cation channel 3; Neuronal amiloride-sensitive cation channel 3; Testis sodium channel 1 (hTNaC1); ASIC3_MOUSE; Dorsal root ASIC (DRASIC); ASIC3_RAT; acid sensing ion channel subunit 3; amiloride-sensitive cation channel 3, testis; acid-sensing (proton-gated) ion channel 3; testis

	sodium channel 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	ASIC3 (HGNC:101)
Function	Forms pH-gated heterotrimeric sodium channels that act as postsynaptic excitatory receptors in the nervous system (PubMed:10842183, PubMed:11587714, PubMed:9744806, PubMed:9886053). Upon extracellular acidification, these channels generate a biphasic current with a fast inactivating and a slow sustained phase (PubMed:10842183, PubMed:9744806, PubMed:9886053). ASIC3 is more sensitive to protons and gates between closed, open, and desensitized states faster than other ASICs (By similarity). Displays high selectivity for sodium ions but can also permit the permeation of other cations (PubMed:9744806, PubMed:9886053). As a neuronal acid sensor, probably contributes to mechanoreception, acid nociception, and heat nociception (By similarity). By forming heterotrimeric channels with ASIC2, generates a biphasic current with a fast inactivating and a slow sustained phase, which in sensory neurons is proposed to mediate the pain induced by acidosis that occurs in ischemic, damaged or inflamed tissues (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein Cytoplasm {ECO:0000250|UniProtKB:Q6X1Y6}. Note=Preferentially expressed at the plasma membrane of the soma and cellular processes of neurons (By similarity). In part cytoplasmic in cochlea cells (By similarity) Localized in specialized sensory nerve endings (By similarity) {ECO:0000250|UniProtKB:O35240, ECO:0000250|UniProtKB:Q6X1Y6}
Tissue Location	Expressed by sensory neurons. Strongly expressed in brain, spinal cord, lung, lymph nodes, kidney, pituitary, heart and testis.

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