10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-ASIC3 Antibody

Catalog # ABO11241

Product Information

Application	WB
Primary Accession	Q9UHC3
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Acid-sensing ion channel 3(ASIC3) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	9311
Other Names	Acid-sensing ion channel 3, ASIC3, hASIC3, Amiloride-sensitive cation channel 3, Neuronal amiloride-sensitive cation channel 3, Testis sodium channel 1, hTNaC1, ASIC3, ACCN3, SLNAC1, TNAC1
Calculated MW	58905
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cell membrane ; Multi-pass membrane protein . Cytoplasm . Cell surface expression may be stabilized by interaction with LIN7B and cytoplasmic retention by interaction with DLG4. In part cytoplasmic in cochlea cells (By similarity). .
Tissue Specificity	Expressed by sensory neurons. Strongly expressed in brain, spinal chord, lung, lymph nodes, kidney, pituitary, heart and testis. .
Source	Eukaryota
Protein Name	Acid-sensing ion channel 3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ASIC3(56-73aa FLYQVAERVRYYREFHHQ), different from the related rat and mouse sequences by two amino acids.
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.
Sequence Similarities	Belongs to the amiloride-sensitive sodium channel (TC 1.A.6) family. ASIC3 subfamily.

Protein Information

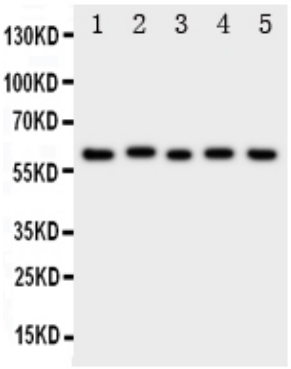
Name	ASIC3 (HGNC:101)
Function	Forms pH-gated heterotrimeric sodium channels that act as postsynaptic excitatory receptors in the nervous system (PubMed:10842183, PubMed:11587714, PubMed:9744806, PubMed:9886053). Upon extracellular acidification, these channels generate a biphasic current with a fast 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.

Background

ASIC3(Acid-Sensing Ion Channel3), also known as TESTIS SODIUM CHANNEL 1(TNAC1) or DORSAL ROOT ACID-SENSING ION CHANNEL(DRASIC), is a protein that in humans is encoded by the ASIC3 gene. ASIC3 belongs to a family of acid-sensing channel proteins that are structurally related to epithelial sodium channel proteins and support acid-activated membrane currents. By radiation hybrid analysis, de Weille et al.(1998) mapped the ACCN3 gene to chromosome 7q35. De Weille et al.(1998) found that human ASIC3 supported an H(+)-gated cation current in COS cells with kinetics similar to those of rat Asic3. Babinski et al.(1999) expressed homomeric human ASIC3 channels in Xenopus oocytes and found that rapid reduction in extracellular pH resulted in a biphasic response characterized by a fast and rapidly desensitizing current followed by a slow and sustained current that returned to baseline only on return to physiologic pH.

Images

Anti-ASIC3 antibody, ABO11241, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Testis Tissue LysateLane 3: U87 Cell LysateLane 4: NEURO Cell



LysateLane 5: SMMC Cell Lysate

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