

# ACCN3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19124a

### **Product Information**

**Application** WB, E **Primary Accession** Q9UHC3 **Other Accession** NP 064718.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB40995 **Calculated MW** 58905 55-83 **Antigen Region** 

## **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

Target/Specificity This ACCN3 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 55-83 amino acids from the N-terminal

region of human ACCN3.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** ACCN3 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name ASIC3 (<u>HGNC:101</u>)

**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:Q6X1Y6}

**Tissue Location** 

Expressed by sensory neurons. Strongly expressed in brain, spinal cord, lung, lymph nodes, kidney, pituitary, heart and testis.

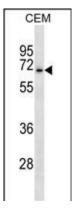
# **Background**

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, two hydrophobic transmembrane regions, and a large extracellular loop, which has many cysteine residues with conserved spacing. The member encoded by this gene is an acid sensor and may play an important role in the detection of lasting pH changes. In addition, a heteromeric association between this member and ACCN1 has been observed as proton-gated channels sensitive to gadolinium. Alternative splicing of this gene generates three transcript variants encoding distinct isoforms.

## References

Borzan, J., et al. Anesthesiology 113(3):647-654(2010) Wu, S., et al. Clin. Chim. Acta 411 (15-16), 1132-1136 (2010): Ko, Y.L., et al. J. Hypertens. 26(11):2154-2160(2008) Su, X., et al. J. Biol. Chem. 281(48):36960-36968(2006) Jones, N.G., et al. J. Neurosci. 24(48):10974-10979(2004)

# **Images**



ACCN3 Antibody (N-term) (Cat. #AP19124a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the ACCN3 antibody detected the ACCN3 protein (arrow).

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