

ACCN2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9270b**Specification**

ACCN2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P78348](#)**ACCN2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 41**Other Names**

Acid-sensing ion channel 1, ASIC1, Amiloride-sensitive cation channel 2, neuronal, Brain sodium channel 2, BNaC2, ASIC1, ACCN2, BNAC2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP9270b](/products/AP9270b) was selected from the C-term region of human ACCN2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ACCN2 Antibody (C-term) Blocking Peptide - Protein Information**Name** ASIC1**Synonyms** ACCN2, BNAC2**Function**

Isoform 2 and isoform 3 function as proton-gated sodium channels; they are activated by a drop of the extracellular pH and then become rapidly desensitized. The channel generates a biphasic current with a fast inactivating and a slow sustained phase. Has high selectivity for sodium ions and can also transport lithium ions with high efficiency. Isoform 2 can also transport potassium, but with lower efficiency. It is nearly impermeable to the larger rubidium and cesium ions. Isoform 3 can also transport calcium ions. Mediates glutamate- independent Ca(2+) entry into neurons upon acidosis. This Ca(2+) overloading is toxic for cortical neurons and may be in part responsible for ischemic brain injury. Heteromeric channel assembly seems to modulate channel properties. Functions as a postsynaptic proton receptor that influences intracellular Ca(2+) concentration and

calmodulin-dependent protein kinase II phosphorylation and thereby the density of dendritic spines. Modulates activity in the circuits underlying innate fear.

Cellular Location

Cell membrane; Multi-pass membrane protein Note=Localizes in synaptosomes at dendritic synapses of neurons Colocalizes with DLG4 (By similarity).

Tissue Location

Expressed in most or all neurons.

ACCN2 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ACCN2 Antibody (C-term) Blocking Peptide - Images**ACCN2 Antibody (C-term) Blocking Peptide - Background**

ACCN2 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 is expressed in most if not all brain neurons, and it may be an ion channel subunit; however, its function as an ion channel remains unknown.

ACCN2 Antibody (C-term) Blocking Peptide - References

Sherwood,T., et.al, J. Biol. Chem. 284 (41), 27899-27907 (2009)Kapoor,N., et.al, J. Biol. Chem. 284 (36), 24526-24541 (2009)Samways,D.S., et.al., Cell Calcium 45 (4), 319-325 (2009)