

Accn2 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI10776

Product Information

Application WB
Primary Accession Q6NXK8

Other Accession <u>NM_009597</u>, <u>NP_033727</u>

Reactivity Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine

Predicted Human, Mouse, Rat, Rabbit, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 59668

Additional Information

Gene ID 11419

Alias Symbol AI843610, ASIC1, ASIC1a, B530003N02Rik, BNaC2, Accn2 Other Names Acid-sensing ion channel 1, ASIC1, Acid-sensing ion channel,

Amiloride-sensitive cation channel 2, neuronal, Brain sodium channel 2,

BNaC2, Asic1, Accn2, Asic, Bnac2

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-Accn2 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions Accn2 antibody - N-terminal region is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name Asic1 {ECO:0000312 | MGI:MGI:1194915}

Function Forms voltage-independent, pH-gated trimeric sodium channels that act as

postsynaptic excitatory receptors in the nervous system, playing a crucial role in regulating synaptic plasticity, learning, and memory (PubMed:<u>11988176</u>, PubMed:<u>12843249</u>, PubMed:<u>15369669</u>, PubMed:<u>17060608</u>). Upon

extracellular pH drop this channel elicits transient, fast activating, and completely desensitizing inward currents (PubMed: 15369669). Displays high selectivity for sodium ions but can also permit the permeation of other cations (PubMed: 15369669). Regulates more or less directly intracellular calcium concentration and CaMKII phosphorylation, and thereby the density

of dendritic spines (PubMed:<u>15369669</u>, PubMed:<u>17060608</u>). Modulates neuronal activity in the circuits underlying innate fear (PubMed:<u>17662962</u>).

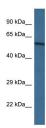
Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P78348} Postsynaptic cell membrane. Cell projection, dendrite. Note=Isolated in synaptosomes from the dendritic synapses of neurons.

Tissue Location

Expressed in brain areas receiving strong excitatory corticofugal input. In hippocampus, expressed in the hilus of the dentate gyrus. In the cerebral cortex expressed in anterior and posterior cingulate cortex, sensory and motor cortices. In the sensory cortex strongest expression is detected in the whisker barrel field. In sensorimotor and cingulate cortex expression is elevated in layer III Also expressed in basal ganglia, striatum, ventral pallidum, olfactory tubercle, and nucleus accumbens. Weakly expressed in thalamus with the exception of the habenula and the medial septal nuclei. In olfactory bulb, preferentially expressed in the glomerular layer, within glomeruli. Expressed in cerebellum in the molecular and granule cell layers. Strongly expressed in amygdala complex, particularly in the lateral and basolateral nuclei. Isoform 1 is more abundant in brain compared to isoform 2 (at protein level). Expressed in the nodose ganglion and dorsal root ganglion. Expressed in dendritic spine cells

Images



WB Suggested Anti-Accn2 Antibody Titration: 1.0 µg/ml Positive Control: Mouse Heart

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