



[Go to Product page](#)

Datasheet for ABIN350049

anti-ASIC1 antibody (Extracellular Domain)

2 Images

2 Publications

Overview

Quantity:	500 µg
Target:	ASIC1 (ACCN2)
Binding Specificity:	Extracellular Domain
Reactivity:	Rat
Host:	Sheep
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	A synthetic peptide from the extracellular domain of rat ACCN2 conjugated to blue carrier protein was used as the antigen. The peptide is homologous in mouse and shares 96% identity with human's.
Isotype:	IgG
Specificity:	Specific for ASIC1.
Cross-Reactivity:	Human, Mouse, Rat
Cross-Reactivity (Details):	Other species not yet tested.
Purification:	IgG

Target Details

Target:	ASIC1 (ACCN2)
---------	---------------

Target Details

Alternative Name: ACCN2 ([ACCN2 Products](#))

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, 2 hydrophobic transmembrane regions, and a large extracellular loop, which has many cysteine residues with conserved spacing. The member encoded by this gene 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. FUNCTION: Cation channel with high affinity for sodium, which is gated by extracellular protons and inhibited by the diuretic amiloride. Also permeable for Ca(2+), Li(+) and K(+). SUBCELLULAR LOCATION: Cell membrane, Multi-pass membrane protein. Note=Localizes in synaptosomes at dendritic synapses of neurons. TISSUE SPECIFICITY: Expressed in dorsal root ganglia (DRG) and sciatic nerve (at protein level). Widely distributed throughout the brain. Expressed in olfactory bulb, neo and allocortical regions, dentate granule cells, pyramidal cells of CA1-CA3 subfields of the hippocampal formation, habenula, basolateral amygdaloid nuclei, and in the Purkinje and granule cells of the cerebellum. Diffusely detected over most other regions of the basal ganglia, including thalamic nuclei, substantia nigra, striatum and globus pallidus, hypothalamus, midbrain, pons, medulla and choroid plexus. Isoform 3 is expressed only in dorsal root ganglion while isoform 1 is expressed in DRG, spinal chord, trigeminal ganglia and the trigeminal mesencephalic nucleus. ACCN Channels, Acid-sensing ion channel 1, ASIC1, Brain sodium channel 2, BNaC2, ACCN2

UniProt: [P55926](#)

Application Details

Application Notes: IHC, WB. A concentration of 10-50 µg/ml is recommended. The optimal concentration should be determined by the end user. Not yet tested in other applications.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitute in 500 µL of sterile water. Centrifuge to remove any insoluble material.

Handling Advice: Avoid freeze and thaw cycles.

Storage: 4 °C/-20 °C

Handling

Storage Comment: Maintain the lyophilised/reconstituted antibodies frozen at -20°C for long term storage and refrigerated at 2-8°C for a shorter term. When reconstituting, glycerol (1:1) may be added for an additional stability. Avoid freeze and thaw cycles.

Expiry Date: 12 months

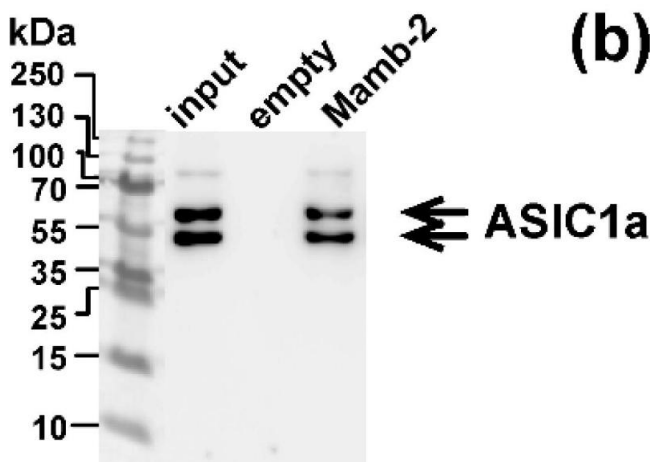
Publications

Product cited in: Qiu, Ding, Zou, Tan, Liu, Fu, Xu: "Divergent roles of amino acid residues inside and outside the BB loop affect human Toll-like receptor (TLR)2/2, TLR2/1 and TLR2/6 responsiveness." in: **PLoS ONE**, Vol. 8, Issue 4, pp. e61508, (2013) ([PubMed](#)).

Giridharan, Cai, Vitale, Naslavsky, Caplan: "Cooperation of MICAL-L1, syndapin2, and phosphatidic acid in tubular recycling endosome biogenesis." in: **Molecular biology of the cell**, Vol. 24, Issue 11, pp. 1776-90, S1-15, (2013) ([PubMed](#)).

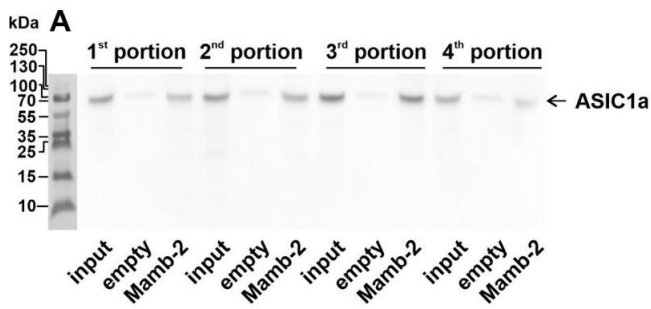
Ji, Ding, Hawke, Xing, Jiang, Mills, Lu: "AKT-dependent phosphorylation of Niban regulates nucleophosmin- and MDM2-mediated p53 stability and cell apoptosis." in: **EMBO reports**, Vol. 13, Issue 6, pp. 554-60, (2012) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot analysis of the ASIC1 subunits extraction from membrane fraction of mel P cells by affinity chromatography on NHS-sepharose resin coupled with mambalgin-2 (n = 3). Source: PMID34680442



Western Blotting

Image 2. Whole membranes used for the analysis of the molecular targets extracted by mambalgin-2 from membrane fraction of A549 cells. The membranes stained by specific antibodies to ASIC1a are shown. Source: PMID35837090