

Product name:	ASIC1 Rabbit Polyclonal Antibody
Cat number:	ABN07216
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthetic peptide from human protein at AA range: 220-280
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:500-1:2000, IHC 1:50-1:200, ICC/IF 1:50-1:200, ELISA 1:10000-1:20000
Molecular Weight:	70-75kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the acid-sensing ion channel (ASIC) family of proteins, which are part of the degenerin/epithelial sodium channel (DEG/ENaC) superfamily. Members of the ASIC family are sensitive to amiloride and function in neurotransmission. The encoded proteins function in learning, pain transduction, touch sensation, and development of memory and fear. Alternatively spliced transcript variants have been described. [provided by RefSeq, Feb 2012], alternative products: The splice variant from ASIC1a described in mouse and rat, which gives rise to an isoform with different N-termini (Asic1b), does not seem to exist in human, 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^{+} . Generates a biphasic current with a fast inactivating and a slow sustained phase. 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., miscellaneous: Potentiated by Ca^{2+} , Mg^{2+} , Ba^{2+} and multivalent cations. Inhibited by anti-inflammatory drugs like salicylic acid (By similarity). Potentiated by FMRFamide-related neuropeptides. PH dependence may be regulated by serine proteases., PTM: Phosphorylation by PKA regulates interaction with PRKCABP and subcellular location. Phosphorylation by PKC may regulate the channel., similarity: Belongs to the amiloride-sensitive sodium channel family., subcellular location: Localizes in synaptosomes at dendritic synapses of neurons. Colocalizes with DLG4., subunit: Homotetramer or heterotetramer with other ASIC proteins (Probable). Interacts with STOM and ACCN1 (By similarity). Interacts with PRKCABP., tissue specificity: Expressed in most or all neurons.,