

Product datasheet for **TA329041**

Asic3 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide KPRSGLEEAQRRQAS(C), corresponding to amino acid residues 2-16 of rat ASIC3.Intracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	acid sensing ion channel subunit 3
Database Link:	NP_775158 Entrez Gene 286920 Rat O35240



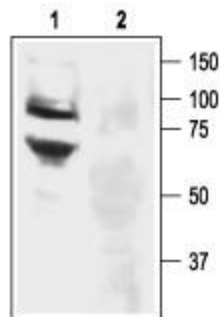
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Background:

ASIC3 is a member of a family of Na⁺ channels that are activated by external protons. The family includes another three members ASIC1, ASIC2 and ASIC4. The ASICs are in fact part of a larger superfamily termed degenerin/epithelial Na⁺ channels (DEG/ENaC) and share with it the same basic characteristics: two transmembrane spanning domains, a large extracellular domain and short intracellular N and C termini. The functional channel is composed of 4 subunits that can be assembled as homo or heterotetramers with the other ASIC subunits. A drop in external pH opens the channel resulting in an inward cation current that is quickly inactivated even in the continuous presence of protons in the medium, although a small residual current may persist. Several lines of evidence indicate that ASIC3 may function as a pain sensor. First, it is specifically located in dorsal root ganglia (DRG) neurons and in nociceptors that are involved in pain detection and transmission. In addition, in conditions such as inflammation and cardiac ischemia that include tissue acidosis and thus pain, ASIC3 currents have been detected. Finally, ASIC3 deficient mice display altered sensitivity to high intensity pain produced by heat or acid. Interestingly, while in rats ASIC3 is expressed almost exclusively in DRG neurons, in humans its expression is more widespread suggesting a more extensive role in human nociception.

Synonyms:

Accn3; AW742291; DRASIC; SLNAC1; TNAC1

Product images:

Western blot analysis of rat DRG lysate: 1. Anti-ASIC3 antibody, (1:200). 2. Anti-ASIC3 antibody, preincubated with the control peptide antigen.