

## Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1)

Recombinant Antibody Catalog # APR10786

### **Specification**

## Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1) - Product Information

Application FC, E, FTA
Primary Accession P78348
Reactivity Human
Clonality Monoclonal
Isotype IgG1
Calculated MW 145.22 KDa

Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1) - Additional Information

Target/Specificity

ASIC1

**Endotoxin** 

< 0.001EU/ µg,determined by LAL method.

**Conjugation** Unconjugated

**Expression system** 

CHO Cell

#### **Format**

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## **Storage**

-80°C for 2 years under sterile conditions -20°C for 1 year under sterile conditions Avoid repeated freeze-thaw cycles.

## Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1) - 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**

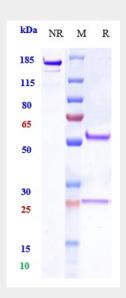
Expressed in most or all neurons.

### Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1) - Protocols

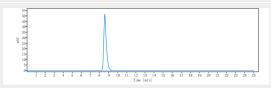
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

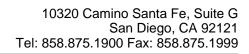
# Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1) - Images



Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-ASIC1 Reference Antibody (Regeneron patent anti-ASIC1) is more than 95%





,determined by SEC-HPLC.