

## **Anti-ASIC3 Antibody**

Catalog # ABO11241

# **Specification**

# **Anti-ASIC3 Antibody - Product Information**

Application WB
Primary Accession Q9UHC3
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Acid-sensing ion channel 3(ASIC3) detection. Tested with WB in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-ASIC3 Antibody - Additional Information**

## **Gene ID 9311**

#### **Other Names**

Acid-sensing ion channel 3, ASIC3, hASIC3, Amiloride-sensitive cation channel 3, Neuronal amiloride-sensitive cation channel 3, Testis sodium channel 1, hTNaC1, ASIC3, ACCN3, SLNAC1, TNAC1

## Calculated MW 58905 MW KDa

## **Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br/>br>

### **Subcellular Localization**

Cell membrane; Multi-pass membrane protein. Cytoplasm. Cell surface expression may be stabilized by interaction with LIN7B and cytoplasmic retention by interaction with DLG4. In part cytoplasmic in cochlea cells (By similarity).

## **Tissue Specificity**

Expressed by sensory neurons. Strongly expressed in brain, spinal chord, lung, lymph nodes, kidney, pituitary, heart and testis. .

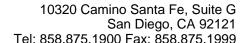
# **Protein Name**

Acid-sensing ion channel 3

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

### **Immunogen**





A synthetic peptide corresponding to a sequence at the N-terminus of human ASIC3(56-73aa FLYQVAERVRYYREFHHQ), different from the related rat and mouse sequences by two amino acids.

#### **Purification**

Immunogen affinity purified.

### **Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

## **Sequence Similarities**

Belongs to the amiloride-sensitive sodium channel (TC 1.A.6) family. ASIC3 subfamily.

## **Anti-ASIC3 Antibody - Protein Information**

Name ASIC3

Synonyms ACCN3, SLNAC1, TNAC1

#### **Function**

Cation channel with high affinity for sodium, which is gated by extracellular protons and inhibited by the diuretic amiloride. Generates a biphasic current with a fast inactivating and a slow sustained phase. In sensory neurons is proposed to mediate the pain induced by acidosis that occurs in ischemic, damaged or inflamed tissue. May be involved in hyperalgesia. May play a role in mechanoreception. Heteromeric channel assembly seems to modulate channel properties.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Cytoplasm. Note=Cell surface expression may be stabilized by interaction with LIN7B and cytoplasmic retention by interaction with DLG4. In part cytoplasmic in cochlea cells (By similarity).

# **Tissue Location**

Expressed by sensory neurons. Strongly expressed in brain, spinal chord, lung, lymph nodes, kidney, pituitary, heart and testis.

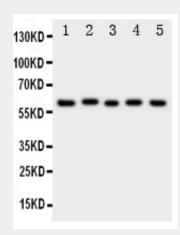
## **Anti-ASIC3 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-ASIC3 Antibody - Images**





Anti-ASIC3 antibody, ABO11241, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Testis Tissue LysateLane 3: U87 Cell LysateLane 4: NEURO Cell LysateLane 5: SMMC Cell Lysate

### Anti-ASIC3 Antibody - Background

ASIC3(Acid-Sensing Ion Channel3), also known as TESTIS SODIUM CHANNEL 1(TNAC1) or DORSAL ROOT ACID-SENSING ION CHANNEL(DRASIC), is a protein that in humans is encoded by the ASIC3 gene. ASIC3 belongs to a family of acid-sensing channel proteins that are structurally related to epithelial sodium channel proteins and support acid-activated membrane currents. By radiation hybrid analysis, de Weille et al.(1998) mapped the ACCN3 gene to chromosome 7q35. De Weille et al.(1998) found that human ASIC3 supported an H(+)-gated cation current in COS cells with kinetics similar to those of rat Asic3. Babinski et al.(1999) expressed homomeric human ASIC3 channels in Xenopus oocytes and found that rapid reduction in extracellular pH resulted in a biphasic response characterized by a fast and rapidly desensitizing current followed by a slow and sustained current that returned to baseline only on return to physiologic pH.