

# **Anti-KCNN4 Antibody**

**Catalog # ABO10533** 

### **Specification**

# **Anti-KCNN4 Antibody - Product Information**

Application WB
Primary Accession O15554
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Intermediate conductance calcium-activated potassium channel protein 4(KCNN4) detection. Tested with WB in Human; Mouse; Rat.

#### Reconstitution

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

## **Anti-KCNN4 Antibody - Additional Information**

**Gene ID 3783** 

#### **Other Names**

Intermediate conductance calcium-activated potassium channel protein 4, SK4, SKCa 4, SKCa4, IKCa1, IK1, KCa3.1, KCa4, Putative Gardos channel, KCNN4, IK1, IKCA1, KCA4, SK4

## Calculated MW 47696 MW KDa

# **Application Details**

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

### **Subcellular Localization**

Membrane; Multi-pass membrane protein.

## **Tissue Specificity**

Widely expressed in non-excitable tissues.

### **Protein Name**

Intermediate conductance calcium-activated potassium channel protein 4

#### 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 KCNN4(14-29aa RRKRLLEQEKSLAGWA), different from the related mouse and rat 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.

## **Anti-KCNN4 Antibody - Protein Information**

Name KCNN4

Synonyms IK1, IKCA1, KCA4, SK4

### **Function**

Forms a voltage-independent potassium channel that is activated by intracellular calcium (PubMed:<a href="http://www.uniprot.org/citations/26148990" target="\_blank">26148990</a>). Activation is followed by membrane hyperpolarization which promotes calcium influx. Required for maximal calcium influx and proliferation during the reactivation of naive T-cells (PubMed:<a href="http://www.uniprot.org/citations/17157250" target="\_blank">17157250</a>, PubMed:<a href="http://www.uniprot.org/citations/18796614" target="\_blank">18796614</a>). Plays a role in the late stages of EGF-induced macropinocytosis (PubMed:<a href="http://www.uniprot.org/citations/24591580" target="\_blank">24591580</a>).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein

### **Tissue Location**

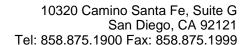
Widely expressed in non-excitable tissues.

## **Anti-KCNN4 Antibody - Protocols**

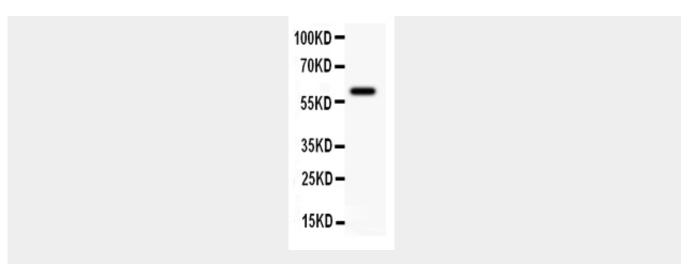
Provided below are standard protocols that you may find useful for product applications.

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

# Anti-KCNN4 Antibody - Images







Anti-KCNN antibody, ABO10533, Western blottingAll lanes: Anti KCNN(ABO10533) at 0.5ug/mlWB: HUT Whole Cell Lysate at 40ugPredicted bind size: 60KDObserved bind size: 60KD

## **Anti-KCNN4 Antibody - Background**

Intermediate conductance calcium-activated potassium channel protein 1(KCNN4, Kca3.1) is part of a potentially heterotetrameric voltage-independent potassium channel that is activated by intracellular calcium. Activation is followed by membrane hyperpolarization, which promotes calcium influx. KCNN4 may be part of the predominant calcium-activated potassium channel in T-lymphocytes. This gene is similar to other KCNN family potassium channel genes, but it differs enough to possibly be considered as part of a new subfamily.