

# **Anti-Cav3.1 Antibody**

**Catalog # AP53765** 

# **Specification**

# **Anti-Cav3.1 Antibody - Product Information**

Application WB
Primary Accession 043497

Reactivity Human, Mouse, Rat Host Rabbit

Clonality Polyclonal Calculated MW 262472

# **Anti-Cav3.1 Antibody - Additional Information**

**Gene ID 8913** 

#### **Other Names**

KIAA1123; Voltage-dependent T-type calcium channel subunit alpha-1G; Cav3.1c; NBR13; Voltage-gated calcium channel subunit alpha Cav3.1

## **Target/Specificity**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cav3.1. The exact sequence is proprietary.

### **Dilution**

WB~~1/500 - 1/1000

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

### Storage

Store at -20 °C. Stable for 12 months from date of receipt

## **Anti-Cav3.1 Antibody - Protein Information**

Name CACNA1G

Synonyms KIAA1123

### **Function**

Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1G gives rise to T-type calcium currents. T-type calcium channels belong to the 'low-voltage activated (LVA)' group and are strongly blocked by mibefradil. A particularity of this type of channel is an opening at quite negative potentials and a voltage-dependent inactivation. T-type channels serve pacemaking functions in both central neurons and cardiac nodal cells and



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support calcium signaling in secretory cells and vascular smooth muscle. They may also be involved in the modulation of firing patterns of neurons which is important for information processing as well as in cell growth processes.

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Cytoplasm

#### **Tissue Location**

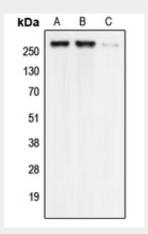
Highly expressed in brain, in particular in the amygdala, subthalamic nuclei, cerebellum and thalamus. Moderate expression in heart; low expression in placenta, kidney and lung. Also expressed in colon and bone marrow and in tumoral cells to a lesser extent. Highly expressed in fetal brain, but also in peripheral fetal tissues as heart, kidney and lung, suggesting a developmentally regulated expression

## **Anti-Cav3.1 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-Cav3.1 Antibody - Images



Western blot analysis of Cav3.1 expression in HEK293T (A), Raw264.7 (B), H9C2 (C) whole cell lysates.

## Anti-Cav3.1 Antibody - Background

Rabbit polyclonal antibody to Cav3.1