

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

Recognizes endogenous levels of Cav3.1 protein.

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 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

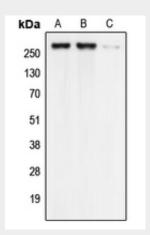
Highly expressed in brain, in particular in the amygdala, subthalamic nuclei, cerebellum and thalamus. Moderate expression in heart; low expression in placenta, kidney and lung. Also expressed in colon and bone marrow and in tumoral cells to a lesser extent. Highly expressed in fetal brain, but also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