

Cav2.2 Polyclonal Antibody

Catalog # AP63664

Specification

Cav2.2 Polyclonal Antibody - Product Information

Application IHC
Primary Accession O00975

Reactivity Human, Rat, Mouse

Host Rabbit Clonality Polyclonal

Cav2.2 Polyclonal Antibody - Additional Information

Gene ID 774

Other Names

Voltage-dependent N-type calcium channel subunit alpha-1B (Brain calcium channel III) (BIII) (Calcium channel, L type, alpha-1 polypeptide isoform 5) (Voltage-gated calcium channel subunit alpha Cav2.2)

Dilution

IHC~~IHC 1:50-100

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Cav2.2 Polyclonal Antibody - Protein Information

Name CACNA1B

Synonyms CACH5, CACNL1A5

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. This alpha-1B subunit gives rise to N-type calcium currents. N-type calcium channels belong to the 'high-voltage activated' (HVA) group. They are involved in pain signaling (PubMed:25296916). Calcium channels containing alpha-1B subunit may play a role in directed migration of immature neurons. Mediates Ca(2+) release probability at hippocampal neuronal soma and synaptic terminals (By similarity).

Cellular Location

Membrane; Multi- pass membrane protein





Tissue Location

Isoform Alpha-1b-1 and isoform Alpha-1b-2 are expressed in the central nervous system, but not in skeletal muscle or aorta. Expressed in the cerebral white matter, cortex, hippocampus, basal ganglia, and cerebellum (PubMed:30982612)

Cav2.2 Polyclonal Antibody - Protocols

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

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

Cav2.2 Polyclonal Antibody - Images









Cav2.2 Polyclonal Antibody - Background

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-1B gives rise to N-type calcium currents. N-type calcium channels belong to the 'high-voltage activated' (HVA) group and are specifically blocked by omega-conotoxin-GVIA (AC P01522) (AC P01522) (By similarity). They are however insensitive to dihydropyridines (DHP). Calcium channels containing alpha-1B subunit may play a role in directed migration of immature neurons.