

Cav2.2 Polyclonal Antibody
Catalog # AP63664**Specification**

Cav2.2 Polyclonal Antibody - Product Information

Application	IHC
Primary Accession	Q00975
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

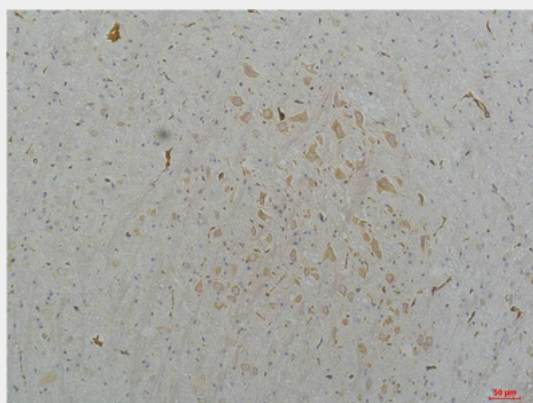
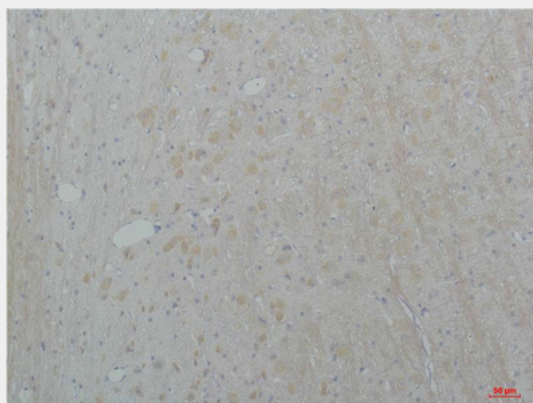
Tissue Location

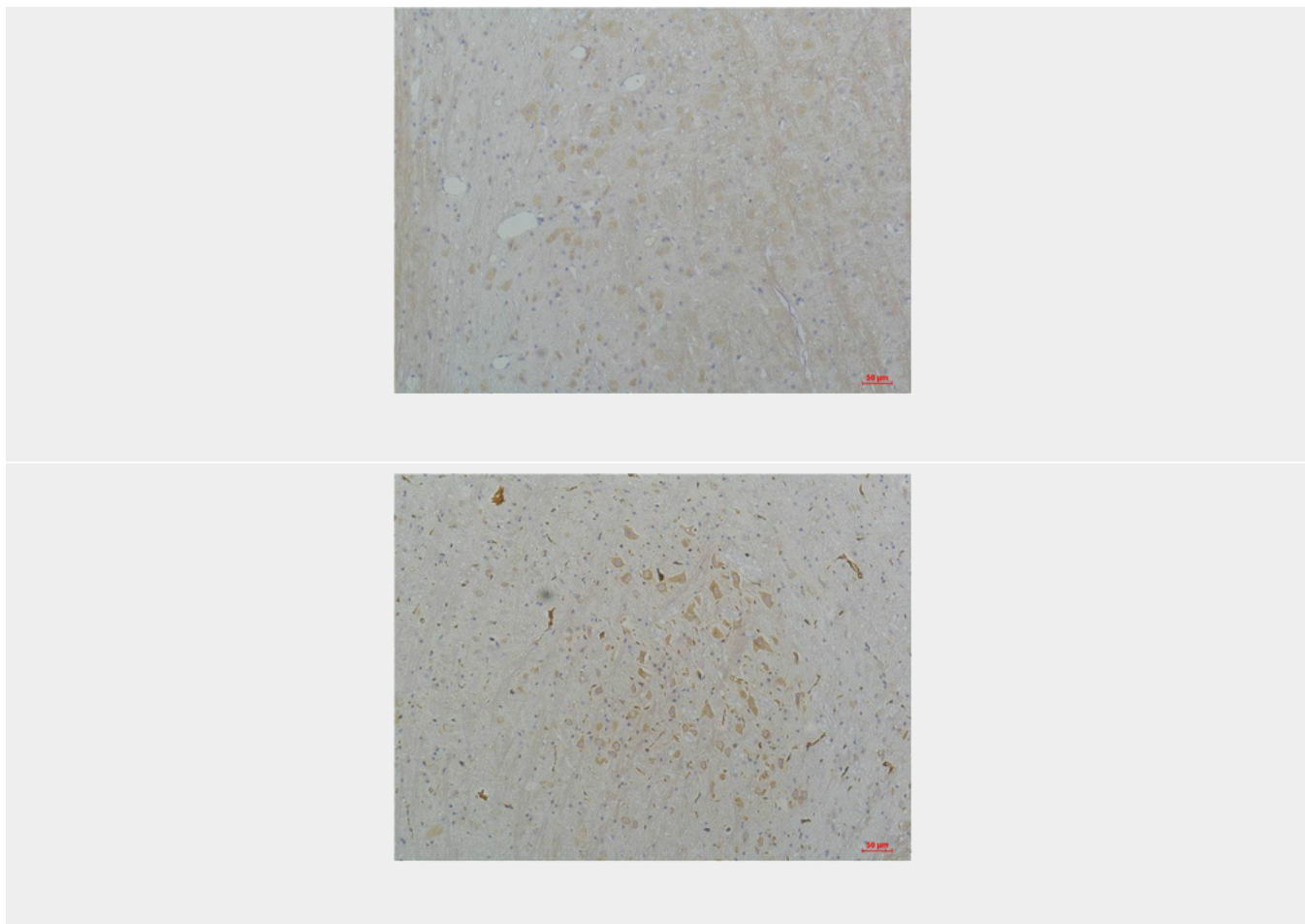
Isoform Alpha-1b-1 and isoform Alpha-1b-2 are expressed in the central nervous system, but not in skeletal muscle or aorta. Expressed in the cerebral white matter, cortex, hippocampus, basal ganglia, and cerebellum (PubMed:30982612)

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](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.