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Anti-Cav1.2 Antibody

Rabbit polyclonal antibody to Cav1.2
Catalog # AP59918

Specification

Anti-Cav1.2 Antibody - Product Information

Application	**WB**
Primary Accession	Q13936
Other Accession	Q01815
Reactivity	**Human, Mouse, Rat, Rabbit**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**248977**

Anti-Cav1.2 Antibody - Additional Information

Gene ID 775

Other Names
CACH2; CACN2; CACNL1A1; CCHL1A1; Voltage-dependent L-type calcium channel subunit alpha-1C; Calcium channel, L type, alpha-1 polypeptide, isoform 1, cardiac muscle; Voltage-gated calcium channel subunit alpha Cav1.2

Target/Specificity
Recognizes endogenous levels of Cav1.2 protein.

Dilution
WB~~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-Cav1.2 Antibody - Protein Information

Name CACNA1C

Synonyms CACH2, CACN2, CACNL1A1, CCHL1A1

Function
Pore-forming, alpha-1C subunit of the voltage-gated calcium channel that gives rise to L-type calcium currents (PubMed:8392192, PubMed:7737988, PubMed:9087614, PubMed:<a href="http://www.uniprot.org/citations/9013606"

target="_blank">9013606, PubMed:9607315, PubMed:12176756, PubMed:17071743, PubMed:11741969, PubMed:8099908, PubMed:12181424, PubMed:29078335, PubMed:29742403, PubMed:16299511, PubMed:20953164, PubMed:15454078, PubMed:15863612, PubMed:17224476, PubMed:24728418, PubMed:26253506, PubMed:27218670, PubMed:23677916, PubMed:30023270, PubMed:30172029, PubMed:34163037). Mediates influx of calcium ions into the cytoplasm, and thereby triggers calcium release from the sarcoplasm (By similarity). Plays an important role in excitation-contraction coupling in the heart. Required for normal heart development and normal regulation of heart rhythm (PubMed:15454078, PubMed:15863612, PubMed:17224476, PubMed:24728418, PubMed:26253506). Required for normal contraction of smooth muscle cells in blood vessels and in the intestine. Essential for normal blood pressure regulation via its role in the contraction of arterial smooth muscle cells (PubMed:28119464). Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group (Probable).

Cellular Location
Cell membrane; Multi-pass membrane protein Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P15381}; Multi-pass membrane protein. Perikaryon {ECO:0000250|UniProtKB:P22002}. Postsynaptic density membrane {ECO:0000250|UniProtKB:P22002}. Cell projection, dendrite {ECO:0000250|UniProtKB:P22002}. Cell membrane, sarcolemma, T-tubule {ECO:0000250|UniProtKB:Q01815}. Note=Colocalizes with ryanodine receptors in distinct clusters at the junctional membrane, where the sarcolemma and the sarcoplasmic reticulum are in close contact. The interaction between RRAD and CACNB2 promotes the expression of CACNA1C at the cell membrane. {ECO:0000250|UniProtKB:P15381}

Tissue Location
Detected throughout the brain, including hippocampus, cerebellum and amygdala, throughout the heart and vascular system, including ductus arteriosus, in urinary bladder, and in retina and sclera in the eye (PubMed:15454078). Expressed in brain, heart, jejunum, ovary, pancreatic beta-cells and vascular smooth muscle Overall expression is reduced in atherosclerotic vascular smooth muscle.

Anti-Cav1.2 Antibody - Protocols

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

- Western Blot

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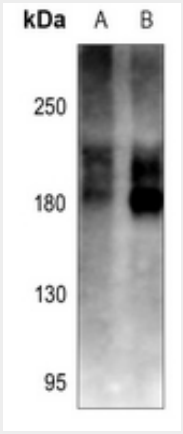
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Cav1.2 Antibody - Images



Western blot analysis of Cav1.2 expression in mouse brain (A), rat brain (B) whole cell lysates.

Anti-Cav1.2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cav1.2. The exact sequence is proprietary.