

**Anti-CACNA1C / Cav1.2 Antibody (Internal)**  
**Rabbit Anti Human Polyclonal Antibody**  
**Catalog # ALS17585****Specification**

---

**Anti-CACNA1C / Cav1.2 Antibody (Internal) - Product Information**

Application	<b>IHC-P</b>
Primary Accession	<a href="#">O13936</a>
Predicted	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>248977</b>

**Anti-CACNA1C / Cav1.2 Antibody (Internal) - Additional Information****Gene ID 775**Alias Symbol **CACNA1C****Other Names**CACNA1C, Alpha 1c, CaV1.2, CACH2, CACNL1A1, CCHL1A1, DHPR, alpha-1 subunit, DHP receptor, DHP<sub>r</sub>, LQT8, TS, CACN2**Target/Specificity**

Human CACNA1C / Cav1.2. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Immunoaffinity purified

**Precautions**

Anti-CACNA1C / Cav1.2 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-CACNA1C / Cav1.2 Antibody (Internal) - 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: [11741969](http://www.uniprot.org/citations/11741969) target="\_blank">11741969</a>, PubMed: [12176756](http://www.uniprot.org/citations/12176756) target="\_blank">12176756</a>, PubMed: [12181424](http://www.uniprot.org/citations/12181424) target="\_blank">12181424</a>, PubMed: [15454078](http://www.uniprot.org/citations/15454078) target="\_blank">15454078</a>, PubMed: [15863612](http://www.uniprot.org/citations/15863612) target="\_blank">15863612</a>, PubMed: [16299511](http://www.uniprot.org/citations/16299511) target="\_blank">16299511</a>, PubMed: [17071743](http://www.uniprot.org/citations/17071743) target="\_blank">17071743</a>)

target="\_blank">17071743</a>, PubMed:<a href="http://www.uniprot.org/citations/17224476" target="\_blank">17224476</a>, PubMed:<a href="http://www.uniprot.org/citations/20953164" target="\_blank">20953164</a>, PubMed:<a href="http://www.uniprot.org/citations/23677916" target="\_blank">23677916</a>, PubMed:<a href="http://www.uniprot.org/citations/24728418" target="\_blank">24728418</a>, PubMed:<a href="http://www.uniprot.org/citations/26253506" target="\_blank">26253506</a>, PubMed:<a href="http://www.uniprot.org/citations/27218670" target="\_blank">27218670</a>, PubMed:<a href="http://www.uniprot.org/citations/29078335" target="\_blank">29078335</a>, PubMed:<a href="http://www.uniprot.org/citations/29742403" target="\_blank">29742403</a>, PubMed:<a href="http://www.uniprot.org/citations/30023270" target="\_blank">30023270</a>, PubMed:<a href="http://www.uniprot.org/citations/30172029" target="\_blank">30172029</a>, PubMed:<a href="http://www.uniprot.org/citations/34163037" target="\_blank">34163037</a>, PubMed:<a href="http://www.uniprot.org/citations/7737988" target="\_blank">7737988</a>, PubMed:<a href="http://www.uniprot.org/citations/8099908" target="\_blank">8099908</a>, PubMed:<a href="http://www.uniprot.org/citations/8392192" target="\_blank">8392192</a>, PubMed:<a href="http://www.uniprot.org/citations/9013606" target="\_blank">9013606</a>, PubMed:<a href="http://www.uniprot.org/citations/9087614" target="\_blank">9087614</a>, PubMed:<a href="http://www.uniprot.org/citations/9607315" target="\_blank">9607315</a>). 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:<a href="http://www.uniprot.org/citations/15454078" target="\_blank">15454078</a>, PubMed:<a href="http://www.uniprot.org/citations/15863612" target="\_blank">15863612</a>, PubMed:<a href="http://www.uniprot.org/citations/17224476" target="\_blank">17224476</a>, PubMed:<a href="http://www.uniprot.org/citations/24728418" target="\_blank">24728418</a>, PubMed:<a href="http://www.uniprot.org/citations/26253506" target="\_blank">26253506</a>). 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:<a href="http://www.uniprot.org/citations/28119464" target="\_blank">28119464</a>). 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-CACNA1C / Cav1.2 Antibody (Internal) - 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](#)

**Anti-CACNA1C / Cav1.2 Antibody (Internal) - Images**