

# CACNA1C polyclonal antibody

Catalog # PAB11506      Size 100 ug

## Applications



### Western Blot (Tissue lysate)

CACNA1C polyclonal antibody (Cat # PAB11506) (0.5 ug/mL) staining of human heart lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## Specification

|                                |                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>     | Goat polyclonal antibody raised against synthetic peptide of CACNA1C.                                                 |
| <b>Immunogen</b>               | A synthetic peptide corresponding to human CACNA1C.                                                                   |
| <b>Sequence</b>                | C-RARGRPSEEEELQD                                                                                                      |
| <b>Host</b>                    | Goat                                                                                                                  |
| <b>Theoretical MW (kDa)</b>    | 240                                                                                                                   |
| <b>Reactivity</b>              | Human                                                                                                                 |
| <b>Form</b>                    | Liquid                                                                                                                |
| <b>Purification</b>            | Antigen affinity purification                                                                                         |
| <b>Concentration</b>           | 0.5 mg/mL                                                                                                             |
| <b>Quality Control Testing</b> | Antibody Reactive Against Synthetic Peptide.                                                                          |
| <b>Recommend Usage</b>         | ELISA (1:16000)<br>Western Blot (0.5-1.5 ug/mL)<br>The optimal working dilution should be determined by the end user. |

|                     |                                                                                                                        |
|---------------------|------------------------------------------------------------------------------------------------------------------------|
| Storage Buffer      | In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)                                                                  |
| Storage Instruction | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing.                                                     |
| Note                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |

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- Enzyme-linked Immunoabsorbent Assay

## Gene Info — CACNA1C

|                    |                                                              |
|--------------------|--------------------------------------------------------------|
| Entrez GeneID      | <a href="#">775</a>                                          |
| Protein Accession# | <a href="#">NP_000710.5</a>                                  |
| Gene Name          | CACNA1C                                                      |
| Gene Alias         | CACH2, CACN2, CACNL1A1, CCHL1A1, CaV1.2, MGC120730, TS       |
| Gene Description   | calcium channel, voltage-dependent, L type, alpha 1C subunit |
| Omim ID            | <a href="#">114205 601005</a>                                |
| Gene Ontology      | <a href="#">Hyperlink</a>                                    |

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene Summary | This gene encodes an alpha-1 subunit of a voltage-dependent calcium channel. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization. The alpha-1 subunit consists of 24 transmembrane segments and forms the pore through which ions pass into the cell. The calcium channel consists of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. There are multiple isoforms of each of these proteins, either encoded by different genes or the result of alternative splicing of transcripts. The protein encoded by this gene binds to and is inhibited by dihydropyridine. Alternative splicing results in many transcript variants encoding different proteins. [provided by RefSeq] |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                    |                                                                                                                                                                                                                                                                   |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other Designations | DHPR, alpha-1 subunit calcium channel, L type, alpha 1 polypeptide, isoform 1, cardiac muscle calcium channel, cardiac dihydropyridine-sensitive, alpha-1 subunit voltage-gated L-type calcium channel Cav1.2 alpha 1 subunit, splice variant 10* voltage-gated c |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Publication Reference

- [Calpastatin binds to a calmodulin-binding site of cardiac Cav1.2 Ca<sup>2+</sup> channels.](#)

Saud ZA, Minobe E, Wang WY, Han DY, Horiuchi M, Hao LY, Kameyama M.

Biochemical and Biophysical Research Communications 2007 Dec; 364(2):372.

## Pathway

- [Arrhythmogenic right ventricular cardiomyopathy \(ARVC\)](#)
- [Calcium signaling pathway](#)
- [Cardiac muscle contraction](#)
- [GnRH signaling pathway](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [Type II diabetes mellitus](#)
- [Vascular smooth muscle contraction](#)

## Disease

- [Anxiety Disorders](#)
- [Bipolar Disorder](#)
- [Cardiovascular Diseases](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Dysthymic Disorder](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)

- [Heart Diseases](#)
- [Hyperparathyroidism](#)
- [Hypertension](#)
- [Inflammation](#)
- [Language Tests](#)
- [Myocardial Infarction](#)
- [Narcolepsy](#)
- [Schizophrenia](#)
- [Task Performance and Analysis](#)
- [Tobacco Use Disorder](#)