

CACNB1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16144b

Specification

CACNB1 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q02641

Other Accession <u>Q9MZL7</u>, <u>NP 954855.1</u>, <u>NP 000714.3</u>

Reactivity
Predicted
Bovine
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Bovine
Rabbit
Polyclonal
Rabbit IgG
55714
S43-572

CACNB1 Antibody (C-term) - Additional Information

Gene ID 782

Other Names

Voltage-dependent L-type calcium channel subunit beta-1, CAB1, Calcium channel voltage-dependent subunit beta 1, CACNB1, CACNLB1

Target/Specificity

This CACNB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 543-572 amino acids from the C-terminal region of human CACNB1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CACNB1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CACNB1 Antibody (C-term) - Protein Information

Name CACNB1



Synonyms CACNLB1

Function Regulatory subunit of L-type calcium channels (PubMed:1309651, PubMed:15615847, PubMed:8107964). Regulates the activity of L-type calcium channels that contain CACNA1A as pore-forming subunit (By similarity). Regulates the activity of L-type calcium channels that contain CACNA1C as pore-forming subunit and increases the presence of the channel complex at the cell membrane (PubMed:15615847). Required for functional expression L-type calcium channels that contain CACNA1D as pore-forming subunit (PubMed:1309651). Regulates the activity of L-type calcium channels that contain CACNA1B as pore-forming subunit (PubMed:8107964).

Cellular Location

Cell membrane, sarcolemma; Peripheral membrane protein {ECO:0000250|UniProtKB:P19517}; Cytoplasmic side {ECO:0000250|UniProtKB:P19517}. Cell membrane; Peripheral membrane protein

Tissue Location

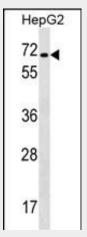
Detected in heart ventricle (at protein level) (PubMed:15615847). Isoform 1 and isoform 3 are expressed in brain, heart, spleen, central nervous system and neuroblastoma cells. Isoform 2 is expressed in skeletal muscle.

CACNB1 Antibody (C-term) - Protocols

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

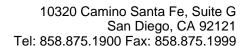
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CACNB1 Antibody (C-term) - Images



CACNB1 Antibody (C-term) (Cat. #AP16144b) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the CACNB1 antibody detected the CACNB1 protein (arrow).

CACNB1 Antibody (C-term) - Background





The protein encoded by this gene belongs to the calcium channel beta subunit family. It plays an important role in the calcium channel by modulating G protein inhibition, increasing peak calcium current, controlling the alpha-1 subunit membrane targeting and shifting the voltage dependence of activation and inactivation. Alternative splicing occurs at this locus and three transcript variants encoding three distinct isoforms have been identified.

CACNB1 Antibody (C-term) - References

Jangsangthong, W., et al. Pflugers Arch. 459(3):399-411(2010) Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Lim, J., et al. Cell 125(4):801-814(2006) Foell, J.D., et al. Physiol. Genomics 17(2):183-200(2004)