

## **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
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Bovine
Rabbit
Polyclonal
Rabbit IgG
55714
543-572

## 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

#### **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:8107964, PubMed:15615847). 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**

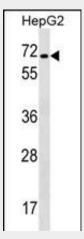
Detected in heart ventricle (at protein level) (PubMed:15615847). Isoform 1 and isoform 3 are expressed in brain, heart, spleen, central nervous system and neuroblastoma cells. Isoform 2 is expressed in skeletal muscle.

## 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
- Immunofluorescence
- <u>Immunoprecipitation</u>
- 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)