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CACNB1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16144b

Product Information

Application	WB, E
Primary Accession	Q02641
Other Accession	Q9MZL7, NP_954855.1, NP_000714.3
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35369
Calculated MW	65714
Antigen Region	543-572

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.

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.

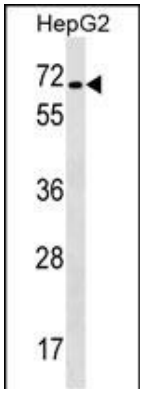
Background

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.

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)
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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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.