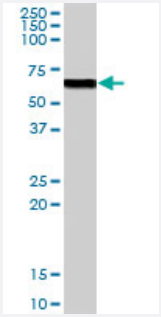
CACNB4 polyclonal antibody

Catalog # PAB7161 Size 100 ug

Applications



Western Blot (Tissue lysate)

CACNB4 polyclonal antibody (Cat # PAB7161) (0.2 ug/mL) staining of human bone marrow lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of CACNB4.
Immunogen	A synthetic peptide corresponding to human CACNB4.
Sequence	C-DYPDSYQDTYKPH
Host	Goat
Theoretical MW (kDa)	54.7, 58.2, 56.4
Reactivity	Human
Specificity	This antibody is expected to recognize all three reported isoforms (NP_001005747.1, NP_000717.2 , NP_001005746.1).
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.

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Recommend Usage	ELISA (1:4000) Western Blot (0.2-0.6 ug/mL) 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. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Tissue lysate)

  CACNB4 polyclonal antibody (Cat # PAB7161) (0.2 ug/mL) staining of human bone marrow lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Gene Info — CACNB4

Entrez GeneID	785
Protein Accession#	NP_001005747.1;NP_000717.2;NP_001005746.1
Gene Name	CACNB4
Gene Alias	CAB4, CACNLB4, EA5, EJM
Gene Description	calcium channel, voltage-dependent, beta 4 subunit
Omim ID	600669 601949 606904
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the beta subunit family of voltage-dependent calcium channel co mplex proteins. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1: 1:1:1 ratio. Various versions of each of these subunits exist, either expressed from similar genes or the result of alternative splicing. The protein encoded by this locus plays an important role in cal cium channel function by modulating G protein inhibition, increasing peak calcium current, controlli ng the alpha-1 subunit membrane targeting and shifting the voltage dependence of activation and inactivation. Certain mutations in this gene have been associated with idiopathic generalized epil epsy (IGE) and juvenile myoclonic epilepsy (JME). Multiple transcript variants encoding different is oforms have been found for this gene. [provided by RefSeq

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Other Designations	dihydropyridine-sensitive L-type, calcium channel beta-4 subunit|voltage dependent calcium channel beta 4 subunit

Publication Reference

- Calcium channel beta 4 (CACNB4): human ortholog of the mouse epilepsy gene lethargic.

  Escayg A, Jones JM, Kearney JA, Hitchcock PF, Meisler MH.

  Genomics 1998 May; 50(1):14.

Pathway

- Arrhythmogenic right ventricular cardiomyopathy (ARVC)
- Cardiac muscle contraction
- Hypertrophic cardiomyopathy (HCM)
- MAPK signaling pathway

Disease

- Epilepsies
- Epilepsy
- Genetic Predisposition to Disease

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