

CACNB4 mouse monoclonal antibody (hybridoma)

Catalog # H00000785-M

Size Up to 5 Clones

Specification

Product Description	Mouse monoclonal antibody raised against a full-length recombinant CACNB4.
Immunogen	CACNB4 (NP_000717.2, 1 a.a. ~ 520 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MSSSSYAKNGTADGPHSPTSQVARGTTTTRSRSLKRSDGSTTSTSFILRQGSADSYTSRPSDSDV SLEEDREAIRQEREQQAAIQLEAKSKPVAFVKTNVSYCGALDEDVPVPSTAISFDAKDFLHIKE KYNNDWWIGRLVKEGCEIGFIPSPRLLENIRIQEQKRGRFHGGKSSGNSSSSLGEMVSGTFRAT PTSTAKQKQKVTEHIPPYDVVPSMRPVVLVGP SLKGYEVTMMQKALFDFLKHFRDGRISITRVTA DISLAKRSVLNNPSKRAIIERSNTRSSLAEVQSEIERIFELARSLQLVLDADTINHPAQLIKTSLAPIV HVKVSSPKVLQRLIKSRGKSQSKHLNVQLVAADKLAQCPEMFVDILDENQLEDACEHLGEYLE AYWRATHHTSSTPMTPLLGRNLGSTALSPYPTAISGLQSQRMRHSNHSTENSPERRSLMTSDENY HNERARKSRNRLSSSSQHSRDHYPLVEEDYPDSYQDTYKPHRNRGSPGGYSHDSRHRL
Host	Mouse
Reactivity	Human
Quality Control Testing	Antibody reactivity and specificity confirmed by ELISA and Western Blot.
Deliverables	Up to 5 positive hybridoma clones will be delivered to customer in the cryotube format.
Note	Customer should check the viability of the hybridomas within one month from the date of receipt. Fee -for-service of long term hybridoma storage can be performed upon customer's request.

Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- ELISA

Gene Info — CACNB4

Entrez GeneID [785](#)

GeneBank Accession# [NM_000726.2](#)

Protein Accession# [NP_000717.2](#)

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 complex 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 calcium channel function 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. Certain mutations in this gene have been associated with idiopathic generalized epilepsy (IGE) and juvenile myoclonic epilepsy (JME). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

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

Pathway

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

Disease

- [Epilepsies](#)
- [Epilepsy](#)
- [Genetic Predisposition to Disease](#)