

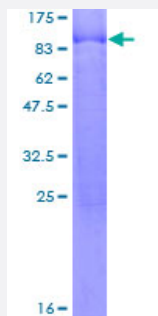
Full-Length

CACNB4 (Human) Recombinant Protein (P01)

Catalog # H00000785-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human CACNB4 full-length ORF (NP_000717.2, 1 a.a. - 520 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSSSSYAKNGTADGPHSPTSQVARGTTTTRRSRLKRSDGTTSTSFILRQGSADSYTSRPSDS
SLEEDREAIRQEREQQAAIQLERAKSKPVAFVKTNSYCGALDEDVPVPSTAISFDAKDFLHIKE
KYNNDWWIGRLVKEGCEIGFIPSPRLLENIRIQEQKRGRFHGGKSSGNSSSSLGEMVSGTFRAT
PTSTAKQKQKVTEHIPPYDVVPSMRPVVLVGPSLKGYEVTMMQKALFDFLKHFRDGRISITRVTA
DISLAKRSVLNPNPSKRAIERSNTRSSLAQVQSEIERIFELARSLQLVVLADDTINHPAQLIKTSLAPIV
HVKVSSPKVLQRLIKSRGKSQSKHLNVQLVAADKLAQCPPEMFDVILDENQLEDACEHLGEYLE
AYWRATHTTSSPTMTPLLGRNLGSTALSPYPTAISGLQSQMRHSNHSTENSPIERRSLMTSDENY
HNERARKSRNRLSSSSQHSRDHYPLVEEDYPDSYQDTYKPHRNRGSPGGYSHDSRHRL

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

84.6

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

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](#)