

Product datasheet for TP310440

OriGene Technologies, Inc.

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CACNB4 (NM_000726) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human calcium channel, voltage-dependent, beta 4 subunit (CACNB4),

transcript variant 2, 20 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC210440 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSSSSYAKNGTADGPHSPTSQVARGTTTRRSRLKRSDGSTTSTSFILRQGSADSYTSRPSDSDVSLEEDR EAIRQEREQQAAIQLERAKSKPVAFAVKTNVSYCGALDEDVPVPSTAISFDAKDFLHIKEKYNNDWWIGR LVKEGCEIGFIPSPLRLENIRIQQEQKRGRFHGGKSSGNSSSSLGEMVSGTFRATPTSTAKQKQKVTEHI PPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFDGRISITRVTADISLAKRSVLNNPSKRAII ERSNTRSSLAEVQSEIERIFELARSLQLVVLDADTINHPAQLIKTSLAPIIVHVKVSSPKVLQRLIKSRG KSQSKHLNVQLVAADKLAQCPPEMFDVILDENQLEDACEHLGEYLEAYWRATHTTSSTPMTPLLGRNLGS TALSPYPTAISGLQSQRMRHSNHSTENSPIERRSLMTSDENYHNERARKSRNRLSSSSQHSRDHYPLVEE DYPDSYQDTYKPHRNRGSPGGYSHDSRHRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 58 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





CACNB4 (NM_000726) Human Recombinant Protein - TP310440

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: <u>NP 000717</u>

Locus ID: 785

 UniProt ID:
 000305

 RefSeq Size:
 7979

 Cytogenetics:
 2q23.3

RefSeq ORF: 1560

Synonyms: CAB4; CACNLB4; EA5; EIG9; EJM; EJM4; EJM6

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), juvenile myoclonic epilepsy (JME), and

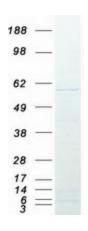
episodic ataxia, type 5. [provided by RefSeq, Aug 2016]

Protein Families: Druggable Genome, Ion Channels: Other

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated

cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway

Product images:



Coomassie blue staining of purified CACNB4 protein (Cat# TP310440). The protein was produced from HEK293T cells transfected with CACNB4 cDNA clone (Cat# [RC210440]) using MegaTran 2.0 (Cat# [TT210002]).