CACB2 Human Protein

PRODUCT OVERVIEW

Product Name	CACB2, Protein
Full Product Name	Human CACB2-Strep full length protein-synthetic nanodisc
Product Gene Name	CACB2 protein
Product Synonym Names	CAB2; CACNLB2; CAVB2; MYSB
Host	HEK293
Form/Format	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5%-8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with pH lower
Preparation and Storage	Store at -20 degree C to -80 degree C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80 degree C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Molecular Weight	65,658 Da
OMIM	600003
3D Structure	ModBase 3D Structure for Q08289
Tag	C-DYKDDDDK&Strep
Product Categories/Family for CACB2 protein	Full Length Transmembrane Proteins; Ion Channels: Other
Related Product Information for CACB2 protein	This gene encodes a subunit of a voltage-dependent calcium channel protein that is a member of the voltage-gated calcium channel superfamily. The gene product was originally identified as an antigen target in Lambert-Eaton myasthenic syndrome, an autoimmune disorder. Mutations in this gene are associated with Brugada syndrome. Alternatively spliced variants encoding different isoforms have been described. [provided by RefSeq, Feb 2013]
Other Notes	Small volumes of CACB2 protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CACB2 purchase	MBS1883667 is a protein targeting CACB2. Also known as Human CACB2-Strep full length protein-synthetic nanodisc. Host: HEK293.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CACB2. It may not necessarily be applicable to this product.

NCBI GI #	148232726
NCBI GeneID	783
NCBI Accession #	NP_000715
UniProt Primary Accession #	Q08289
UniProt Secondary Accession #	O00304; Q5QJ99; Q5QJA0; Q5VVG9; Q5VVH0; Q5VWV6; Q6TME1; Q6TME2; A6PVM5; A6PVM7; A6PVM8
UniProt Related Accession #	Q08289; AAB27916
GenBank Nucleotide #	NM_000724.3
NCBI Official Full Name	voltage-dependent L-type calcium channel subunit beta-2 isoform 1

NCBI Official Synonym Full Names	calcium channel, voltage-dependent, beta 2 subunit
NCBI Official Symbol	CACNB2
NCBI Official Synonym Symbols	MYSB; CAVB2; CACNLB2
UniProt Protein Name	Voltage-dependent L-type calcium channel subunit beta-2
UniProt Synonym Protein Names	Calcium channel voltage-dependent subunit beta 2; Lambert-Eaton myasthenic syndrome antigen B; MYSB
UniProt Gene Name	CACNB2
UniProt Synonym Gene Names	CACNLB2; MYSB; CAB2; MYSB
UniProt Entry Name	CACB2_HUMAN
NCBI Protein Information	voltage-dependent L-type calcium channel subunit beta-2
UniProt Comments for CACB2	CACNB2: The beta subunit of voltage-dependent calcium channels contributes to the function of the calcium channel by increasing peak calcium current, shifting the voltage dependencies of activation and inactivation, modulating G protein inhibition and controlling the alpha-1 subunit membrane targeting. Defects in CACNB2 are the cause of Brugada syndrome type 4 (BRGDA4). A heart disease characterized by the association of Brugada syndrome with shortened QT intervals. Brugada syndrome is a tachyarrhythmia characterized by right bundle branch block and ST segment elevation on an electrocardiogram (ECG). It can cause the ventricles to beat so fast that the blood is prevented from circulating efficiently in the body. When this situation occurs (called ventricular fibrillation), the individual will faint and may die in a few minutes if the heart is not reset. Belongs to the calcium channel beta subunit family. 8 isoforms of the human protein are produced by alternative splicing. Protein type: Channel, calcium Chromosomal Location of Human Ortholog: 10p12 Cellular Component: integral to plasma membrane; voltage-gated calcium channel complex; sarcolemma Molecular Function: voltage-gated calcium channel activity; protein binding; calcium channel activity; high voltage-gated calcium channel activity Biological Process: synaptic transmission; axon guidance; visual perception; transport; positive regulation of calcium ion transport; neuromuscular junction development Disease: Brugada Syndrome 4
Research Articles on CACB2	**1.** ADM genotype AA was associated with the highest values of systolic and diastolic blood pressure (BP), while CACNB2 genotype CC carriers had the highest values of diastolic BP in childhood.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/protein/cacb2/1883667