

Product datasheet for **MR230769**

Cacnb1 (NM_001282977) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacnb1 (NM_001282977) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacnb1
Synonyms:	CAB1; Cchb1; Cchl1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR230769 representing NM_001282977
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTCCAGAAGAGCGGCATGTCCCGGGCCCTTACCCACCTTCCAAGAGATCCCTATGGAGGTCTTCG
 ACCCCAGCCACAGGGCAAGTACAGCAAGAGGAAAGGGCGTTCAAAGGTGACAGCGGGAGTACGTCTCT
 GGATACAACATCCAACAGCTTCGTCCGCCAGGGCTCAGCAGAGTCTTACACGAGCCGACCATCAGACTCT
 GATGTGTCTCTGGAGGAGGACCGGAAGCCTTAAGGAAGGAGGCAGAGCGCCAGGCCTTAGCCAGCTCG
 AGAAAGCCAAGACCAACCAGTGGCTTTTGTGTTCCGACAAATGTTGGCTACAATCCGTCTCCAGGGGA
 TGAGGTGCCTGTACAGGGAGTGGCCATCACCTTTGAGCCCAAGGACTTCTACACATCAAGGAGAAGTAC
 AATAATGACTGGTGGATTGGGCGCTGGTGAAGGAAGGCTGCGAGGTTGGCTTCATCCCCAGCCCGGTCA
 AACTGGACAGCCTTCGTCTGCTGCAGGAACAGACCCTGCGCCAGAACCGCCTCAGCTCCAGCAAGTCAGG
 TGACAACCTCCAGTTCAGTCTGGGAGATGTGGTACTGGCACCCGCCGCCACACCCCTGCCAGTGGT
 AATGAAATGACTAACTTTGCCTTTGAGCTAGACCCCTAGAGTTAGAGGAGGAGGAGGCAGAGCTAGGGG
 AGCACGGCGGCTCAGCCAAGACTAGCGTGAGCAGTGTACCACGCCGCCACCCACGGCAAGCGCATCCC
 CTTCTTTAAGAAGACAGAGCACGTGCCCCCTATGACGTGGTGCCTTCCATGAGGCCCATCATCCTGGTG
 GGACCGTCGCTCAAGGGCTATGAGGTGACAGACATGATGCAGAAAGCGTTGTTTGACTTCTCAAGCATC
 GGTTTGATGGCAGGATTTCCATCACCCGGGTAACAGCTGACATTTCCCTGGCCAAACCGTCCGTCCTCAA
 CAACCCAGCAAAACATCATATTGAGCGCTCCAACACGCGTCCAGCCTGGCTGAGGTACAGAGTGAA
 ATTGAGAGGATCTTCGAGCTGGCCCGGACCTTGACGCTGGTGCCTTGGACGCTGACACCATCAACCACC
 CAGCCCAGCTCTCTAAAACGTCGCTGGCCCCATCATTGTTTACATCAAGATCACATCTCCAAGGTACT
 GCAGAGGCTCATCAAATCCCGAGGGAAGTCTCAATCAAACACCTCAATGTCAAATAGCAGCCTCGGAG
 AAGCTGGCACAGTGCCCCCGAAATGTTTGACATAATCCTGGACGAGAACCAATTGGAAGATGCCTGCG
 AGCACCTGGCTGAGTACTTGAAGCCTACTGGAAGGCCACACATCCGCCTAGCAGCACGCCACCCAATCC
 GCTGCTGAACCGACCATGGCTACCGCAGCTCTGGTGCAGCCCTGCCCCCGTCTCAAACCTCCAGGGA
 CCCTACCTTGCTTCCGGGGACCAGCCGCTGGACCGGGCCACTGGGGAACATGCCAGTGTGCACGAGTACC
 CCGGGGAACCTGGGCCAGCCCCAGGCCTTTACCCAGCAACCACCCACCTGGCCGGCAGGCACCCTGCG
 GCGCTATCCCGCAAGACACCTTTGATGCTGACACCCCGGCAGCCGAAATTCTGCCTACACGGAGCCG
 GGAGACTCGTGTGGACATGGAGACAGACCCCTCAGAGGGCCAGGCCTGGAGACCCTGCAGGGGGAG
 GCACACCACCGCCCGCAGGGCTCCTGGGAAGACGAGGAAGACTATGAGGAGGAGATGACCGACAACAG
 GAACCGGGGCCGAATAAGGCCGCTACTGTGCGGAGGGTGGTGGCCGGTTCTGGGGCGCAATAAGAAT
 GAGCTGGAGGGCTGGGGACAAGGCGTCTACATCCGC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230769 representing NM_001282977
 Red=Cloning site Green=Tags(s)

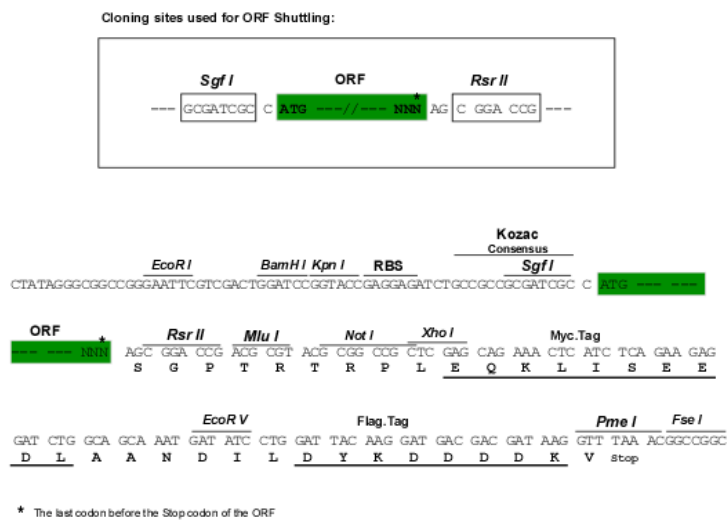
MVQKSGMSRGPYPPSQEIPMEVFDPSQKGYSKRKGRFKRSDGSTSSDSTNSFVRQGSAESYTSRPSDS
 DVSLIEDREALRKEAERQALAQLEKAKTKPVAFVTRTNVGNPSPGDEVPVQGVAITFEPKDFLHIKEY
 NNDWWIGRLVKEGCEVGFIPSPVKLDSLRLLEQTLRQNLSSSKSGDNSSSSLGDVVTGTRRTPPASG
 NEMTNFAFELDPLELEEEEAELGEHGSAKTSVSSVTPPPHKGKRIPIFFKKEHVPPYDVVPSMRPIILV
 GPSLKGVEVTDMMQKALFDLKHFRFDGRISITRVTADISLAKRSVLNPNPKHIIERSNTRSSLAEVQSE
 IERIFELARTLQVALDADTINHPAQLSKTSLAPIIVYIKITSPKVLQRLIKSRGKSQSKHLNVQIAASE
 KLAQCPEPMFDIILDENQLEDACEHLAEYLEAYWKATHPPSSTPPNLLNRTMATAALAASPAPVSNLQG
 PYLASGDQPLDRATGEHASVHEYPGELGQPPLYPNSHPPGRAGTLRALSRQDTFDADTPGSRNSAYTEP
 GDSCVDMETDPSEGPDPAGGGTTPARQGSWEDEEYEEEMTDNRNRGRNKARYCAEGGGPVLGRNKN
 ELEGWGQGVYIR

SGPTRRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-RsrII

Cloning Scheme:



ACCN: NM_001282977

ORF Size: 1926 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001282977.1](#), [NP_001269906.1](#)

RefSeq Size: 3524 bp

RefSeq ORF: 1929 bp

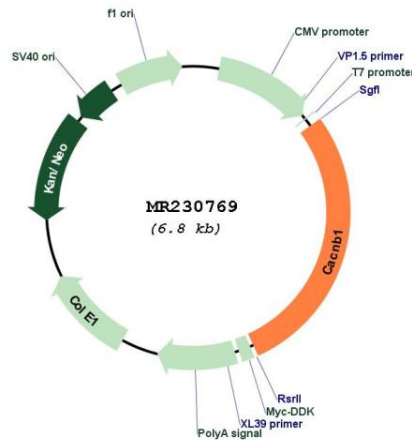
Locus ID: 12295

Cytogenetics: 11 61.5 cM

MW: 70.8 kDa

Gene Summary: Regulatory subunit of L-type calcium channels. Regulates the activity of L-type calcium channels that contain CACNA1A as pore-forming subunit (By similarity). Regulates the activity of L-type calcium channels that contain CACNA1C as pore-forming subunit and increases the presence of the channel complex at the cell membrane. Required for functional expression L-type calcium channels that contain CACNA1D as pore-forming subunit. Regulates the activity of L-type calcium channels that contain CACNA1B as pore-forming subunit (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR230769