

Product datasheet for **MR222874**

Cacnb3 (NM_001044741) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacnb3 (NM_001044741) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacnb3
Synonyms:	Beta3; Ca(v)beta3; CAB3; Cchb3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222874 representing NM_001044741
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTTTTTCTGACTCCAGTGCACCTTCTCTGCTGAACGAGGGTTCAGCCGACTCTACACCAGCCGCC
 CCTCTCTGGACTCAGACGTCTCCCTGGAGGAGGACCGGGAGAGTGCCCGCGAGAAGTGGAGAGTACGGC
 TCAGCAGCAGCTGAAAAGAGCCAAGCACAAACCTGTGGCATTGCTGTGAGGACCAATGTGACTACTGT
 GGGGTTCTGGATGAGGAGTCCCGGTCCAGGGCTCTGGAGTCACTTTGAGGCCAAAAGTTTTCTGCACA
 TAAAGAGAAGTACAGCAATGACTGGTGGATCGGGAGGCTAGTAAAAGAGGGCGGAGACATCGCCTTCAT
 CCCCAGCCCCAACGCCTGGAGAGCATCCGGCTCAAACAGGAACAGAAGGCCAGGAGATCTGGAAACCTT
 TCCAGCCTGGGTGACATTGGCAACCGACGCTCTCCTCCTCCGTCTCTAGCCAAGCAGAAGCAAAGCAGG
 CGGAACATGTTCCCCGATGATGTGGTGCCCTCATGCGGCCTGTGGTCTGGTGGGACCCTCTCTGAA
 AGGCTATGAGGTCACGGACATGATGCAGAAGCGCTCTTCGACTTCCTAAACACAGGTTTGTATGGCAGG
 ATCTCCATCACACGCGTACGGCCGACCTCTCGCTGGCCAAGCGCTCTGTGCTCAACAATCTGGCAAGA
 GGACCATATTGAGCGCTCCTCCGCCGCTCCAGCATTGCTGAAGTGCAGAGTGAGATTGAGCGCATATT
 CGAGCTGGCCAAATCCCTGCAGCTAGTGGTGTGGATGCTGACACCATCAACCACCCAGCACAATTGCC
 AAGACCTCACTGGCTCCCATCATCGTCTTTGTCAAAGTGTCTCGCCAAAGGTAAGTGCAGCGACTGATCC
 GCTCCAGGGGAAAGTACAGATGAAGCACCTCACTGTACAGATGATGGCGTACGATAAGCTGGTTCACTG
 CCCACCCGAGTCATTGACGTGATTCTGGATGAGAACCAGCTAGAAGTGCCTGTGAGCACCTGGCTGAA
 TACTTAGAGGTTTACTGGCGAGCGACCCACCACCAGCACCCGGCCCCGGACTGCTGGTCCGCCTAGTG
 CCATCCCTGGACTTCAGAACCAGCAGCTGCTGGGGGAGCGAGTGGAGGAGCACTACCCCTGGAGAGGGA
 CAGCCTGATGCCCTCAGATGAGGCCAGCGAGAGCTCCCGCCAGGCTGGACCGGATCTTCACAGCGCAGC
 TCTCGCCATCTGGAGGAGGACTATGCAGATGCCTACCAGGACCTGTACCAGCCTACCCGCCAACACACCT
 CGGGGCTGCCAGTGCTAACGGGCACGACCCCCAAGACCGGCTCTAGCCAGGACTCGGAGCATGACCA
 CAATGACCGGAACTGGCAGCGTAACCGGCCTTGCCCAAGGACAGCTAC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222874 representing NM_001044741
 Red=Cloning site Green=Tags(s)

MSFSDSSATFLLNEGSADSYTSRPSLSDVSLIEDRESARREVESQAQQQLERAKHKPVAFVTRNVSYS
 GVLDEECPVQSGVNF EAKDFLHIKEKYSNDWWIGRLVKEGGDIAFIPSPQRLESIRLQEQKARRSGNP
 SSLGDIGNRRSPPPSLAKQKQKQAEHVPPYDVVPSMRPVVLVGP SLKGYEVTDMMQKALFDFLKHFRFDGR
 ISITRVADLSLAKRSVLNPNPKRTI IERS SARSSIAEVQSEIERIFELAKSLQLVVL DADTINHQAQLA
 KTS LAP IIVFVKVSSPKVLQRL I RSRGKSQMKHLTVQMMAYDKLVQCPPE SFDVILDENQLEDACEHLAE
 YLEVYWRATHHPAPGPGLLGPPSAIPGLQNLQQLGERVEEHSPLERDSLMP SDEASESSRQAWTGSSQRS
 SRHLEEDYADAYQDL YQPHRQHTSGLPSANGHDPQDRLLAQDSEHDHNDNRNWRNPWPKDSY

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDK V

Chromatograms:

https://cdn.origene.com/chromatograms/mm9034_e12.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_001044741

ORF Size: 1449 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_001044741.2](#), [NP_001038206.1](#)

RefSeq Size: 2688 bp

RefSeq ORF: 1452 bp

Locus ID: 12297

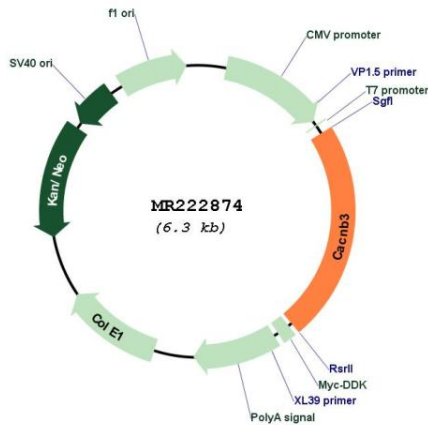
Cytogenetics: 15 54.64 cM

MW: 54.8 kDa

Gene Summary:

Regulatory subunit of the voltage-gated calcium channel that gives rise to L-type calcium currents (PubMed:24751537). Increases CACNA1B peak calcium current and shifts the voltage dependencies of channel activation and inactivation (By similarity). Increases CACNA1C peak calcium current and shifts the voltage dependencies of channel activation and inactivation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222874