

Product datasheet for **MR222977**

Cacnb4 (NM_001037099) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacnb4 (NM_001037099) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacnb4
Synonyms:	3110038O15Rik; Cchb4; lh
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR222977 representing NM_001037099
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGTCTCTGACGGCAAGAACGGGGCGGGACGGGCGCACTCCCCAGCTCACAGGTGGCCCGAG
 GCACCACGACCCGGAGGAGCAGGTTGAAAAGATCGGATGGCAGCACCCTTCTACCAGCTTCATCCTCAG
 ACAGGGGTGAGCAGATTCTATACAAGCAGGCCATCGACTCCGATGTCTCCTTGGAAAGAGGACCGGAA
 GCGATCCGGCAAGAGCGAGAACAGCAAGCAGCTATCCAGCTTGAGAGAGCGAAGTCCAAACCTGTAGCTT
 TTGCGGTGAAAACGAACGTGAGCTACTGTGGTGCCTGGACGAAGATGTGCCCGTCCCAGCACAGCCAT
 CTCCTTTGACGCCAAGGACTTTCTTACATTAAGAGAAATAACAATGATTGGTGGATAGGAAGACTG
 GTAAAAGAGGGTGTGAGATTGGCTTCATCCAAGTCCACTGCGCTTGAGAATATTCGGATTCAACAGG
 AACAGAAAAGAGGCCGTTTTTCATGGCGGAAATCGAGTGGAACTCTTCTCCAGTCTGGGAGAAATGGT
 ATCAGGAACATTCGAGCAACTCCACAACAACAGCAAAACAGAAAGCAGAAAGTACGGAGCACATTCCT
 CCGTATGACGTCGTGCCGTCATGCGTCTGTGGTGTAGTGGGCCATCACTGAAAGGTTATGAGGTAA
 CAGACATGATGCAGAAAGCCCTCTTTGATTTCTGAAGCACAGGTTTGTGGGAGGATATCAATAACAAG
 AGTGACAGCTGACATTTCTTTGCTAAGAGATCTGTCCTCAACAATCCTAGCAAGAGAGCAATAATTGAA
 CGTTCCAACACAGATCCAGCTTAGCGGAAGTACAAAGTGAATTTGAAAGAAATTTTGGATTGGCAAGAT
 CTTTGAATTTGGTTGTTCTTGATGCAGACACCATCAACCACCCAGCACAGCTGATAAAGACATCCTTAGC
 ACCCATCATCGTCCACGTGAAGGTCTCGTCCCCAAAGTTTTACAGCGGTGATTAAGTCCAGAGGAAAG
 TCCCAAAGCAAACACTTGAATGTTCAACTGGTGGCGCCGATAAACTGGCCAGTCCCGCTGAAATGT
 TTGATGTTATATTAGATGAGAATCAACTTGAGGATGCCTGTGAACATCTGGGAGAGTACCTGGAGGATA
 CTGGCGTGCCACCACAGCAGCAGTAGCACCCCTATGACCCCTACTGGGGCGGAACGTGGCTCCACA
 GCCCTCTCACCATATCCACAGCAATCTCTGGATTACAGAGTCAGCGAATGAGACACAGCAACCATTCTA
 CAGAGAATTCTCAATTGAAAGACGAAGCCTAATGACCTCGGATGAAAATTACCACAATGAGAGGGCCCG
 CAAGAGTAGGAACCGCTTGTCTCCAGCTCCCAGCACAGCCGAGACCACTACCCTCTGGTGAAGAAGAT
 TACCCGGACTCGTACCAGGACACTTATAAGCCCCATAGGAACCGAGGATCGCCCGGGGGTGCAGCCATG
 ACTCCCGACATAGGCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222977 representing NM_001037099
 Red=Cloning site Green=Tags(s)

MSSSYGKNGAADGPHSPSSQVARGTTTTRRSRLKRSRGSTTSTSFILRQGSADSYTSRPSDSVLSLEEDRE
 AIRQEREQAAIQLERAKSKPVAFVAVKTNVSYCGALDEDVVPSTAI SFDKDFLHIKEKYNNDDWIGRL
 VKEGCEIGFIPSPRLLENIRIQEQKRGRFHGGKSSGNSSSLGEMVSGTFRATPTTTAKQKQKQVTEHIP
 PYDVVPSMRPVVLVGP SLKGYEVTDMMQKALFDLKHFRFDGRISITRVTADISLAKRSVLNPSKRAIIE
 RSNTRSSLAEVQSEIERIFELARSLQLVVLADTINHPAQLIKTSLAPIIVHVKVSSPKVLQRLIKSRGK
 SQSKHLNVQLVAADKLAQCPEMFDVILDENQLEDACEHLGEYLEAYWRATHSSSTPMTPLLGRNVGST
 ALSPYPTAISGLQSRMRHSNHSTENSP IERRSLMTSDENYHNERARKSRNRLSSSSQHSRDHYPLVEED
 YPDSYQDITYKPHRNRGSPGGCSDSRHRL

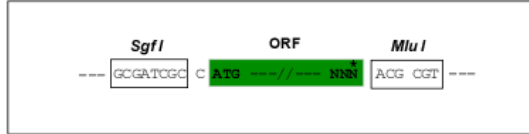
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

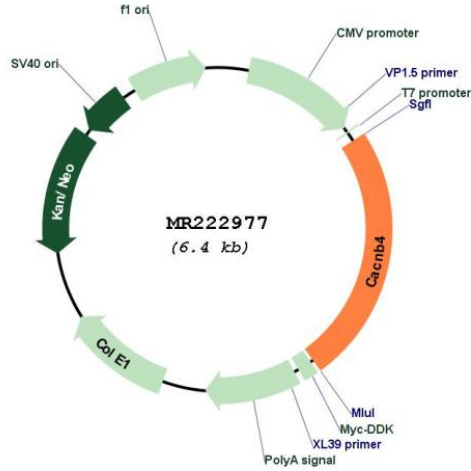
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001037099
ORF Size:	1557 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:	<ol style="list-style-type: none">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_001037099.2
RefSeq Size:	7981 bp
RefSeq ORF:	1560 bp
Locus ID:	12298
UniProt ID:	Q8R0S4
Cytogenetics:	2 29.98 cM
MW:	58.4 kDa
Gene Summary:	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.[UniProtKB/Swiss-Prot Function]