

Product datasheet for MR223012

Cacna1e (NM_009782) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cacna1e (NM_009782) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cacna1e
Synonyms: A430040I15; alp; alpha1E; BII; Cach6; Cacn1a6; Cav2; Cav2.3; Cchr; Cchra1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR223012 representing NM_009782
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTCGCTTCGGGGAGGCGGTGGTCGTTGGCAGGCCAGGCTCAGGCGATGGAGACTCGGACCAGAGCA
 GGAACCGACAAGGAACCCCGTCCCGCCCTCGGGCCGGCGGCCCTACAAGCAGTCAAAGCGCAGAG
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 CAAGACCCCAATGTCTCGAAGACTGGAGAAGACAGAACCATATTTTCATTGGGATCTTCTGCTTTGAAGCT
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ACTGCCTGTGTGGCCATTGTTTCATCACAACCAGCCACAGTGGCTCACTCACCTCCTCTACTATGCAGAGT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >MR223012 representing NM_009782
 Red=Cloning site Green=Tags(s)

MARFGEAVVVGRPGSGDGDSDQSRNRQGTVPVPSGPAAYKQSKAQRARTMALYNPPIVVRQNCFTVNRSL
 FIFGEDNIVRKYAKKLIDWPPFEYMILATIIANCIVLALAQHLPEDDKTPMSRRLEKTEPYFIGIFCFEA
 GIKIVALGFIFHKGSYLRNGWNVDMDFIVVLSGILATAGTHFNTHVDLRTLRAVRVLRPLKLVSGIPSLQI
 VLKSIMKAMVPLLQIGLLLFFAILMFAIIGLEFYSGKLRACFMNNSGILEGFDPHPHPCGVQGPCAGYEC
 KDWIGPNDGITQFDNILFAVLTVFQCITMEGWTTVL YNTNDALGATWNWLYFIPLIIIGSFFVLNLVGLV
 LSGEFAKERERVENRRAFMKLRQQQIERELNGYRAWIDKAEVMLAEENKNSGTSALEVLRRAITIKRSR
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 YFDYVFTGVFTFEMVIKIDQGLILQDGSYFRDLWNILDFVVVVGALVAFALANALGTNKGKRDIKTIKSL
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 SSIPISIDTSTPRRSRRLPPVPPKPRLLSYSSLMRHTGGISPPPDGSEGGSPLASQALESNSACTES
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 GHYRRRRRGGPGGMCGAVSDLLSDTEEDDKC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9010_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:


ACCN: NM_009782

ORF Size: 6819 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_009782.3](#), [NP_033912.2](#)

RefSeq Size: 12697 bp

RefSeq ORF: 6822 bp

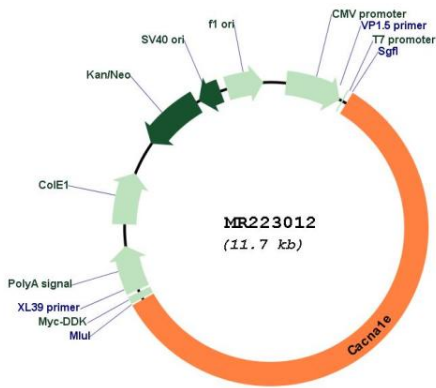
Locus ID: 12290

Cytogenetics: 1 66.14 cM

MW: 257.7 kDa

Gene Summary: This gene encodes an integral membrane protein that belongs to the calcium channel alpha-1 subunits family. Voltage-sensitive calcium channels mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes. Voltage-dependent calcium channels are multi-subunit complexes, comprised of alpha-1, alpha-2, beta and delta subunits in a 1:1:1:1 ratio. The isoform alpha-1E gives rise to R-type calcium currents and belongs to the high-voltage activated group. Calcium channels containing the alpha-1E subunit may be involved in the modulation of neuronal firing patterns, an important component of information processing. [provided by RefSeq, Jul 2008]

Product images:



Circular map for MR223012