

Product datasheet for MR226038

Cacng7 (NM_133189) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacng7 (NM_133189) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacng7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226038 representing NM_133189 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTCACTGCAGCAGCCGCGCCCTGACCCTGCTGAGCAGCGTGTTTGGTGCCTGCGGCCTGCTCCTTG
TGGGCATCGCGGTGAGCAGGACTACTGGCTGTACATGGAGGAGGGGACCGTTTTGCCGAGAACCAGAC
CACCGAGGTCAAGATGGCGCTGCACGCTGGCCTCTGGAGAGTCTGCTTCTTGCAGGTCGGGAGAAGGGG
CGCTGTGTGGCTTCTGAGTACTTCTTGAACCAGAGATCAACTTGGTGACGAAAAACCGGAGAATATTC
TGAAGACAGTGGCAGCGCTACACCTCCCTATGGTCAGTCTCTTCTCGTGTTCCACCGCCTTTGTCAT
CAGCAACATCGGCCACATCCGACCTCAGAGGACCATTCTTGCGTTCGTTTCTGGCATCTTTTTTCATTTTA
TCAGGTCTCTCCTTGGTGGTGGCCTTGGTCTATACATCTCCAGCATCAACGACGAGGTCATGAACAGGC
CCAGCAGCTCTGAGCAGTACTTTCACTATCGCTACGGTGGTCTTTGCCTTCGCTGCTTCTTCTTCT
TCTCAAAGAGGGGGCCGGAGTCAATGTCGTGACTTGTTCACCAAGCGCTACGCGGAGGAAGAGATGTAT
CGCCCGCACCCGGCCTTCTACCGACCGCTCTCAGCGACTGCTCCGACTACTCCGGCCAGTTTCTGCAGC
CCGAGGCGTGGCGTCGAGGCCGAGCCCTCCGACATCTCTAGCGAGTCTCCATTAGATGACGAAAA
TTACCCCCGGCCATCAAGTACCGGACCATCTCCACATCTCCACTTCGCCGTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR226038 representing NM_133189
Red=Cloning site Green=Tags(s)

MSHCSSRALTLSSVFGACGLLLVGIAVSTDYWLYMEEGTLPQNTTEVKMALHAGLWRVCFAGREKG
 RCVASEYFLEPEINLVTENTENILKTVRTATPFPMVSLFLVFTAFVISNIGHIRPQRTILAFVSGIFFIL
 SGLSLVGLVLYISSINDEVNRPSSSEQYFHRYGWSFAFAASSFLLKEGAGVMSVYLF TKRYAEEEMY
 RPHPAFYRPRLSDCSDYSGQFLQPEAWRRGRSPSDISSDYSIQMTQNYPPAIKYPDHLHISTSPC

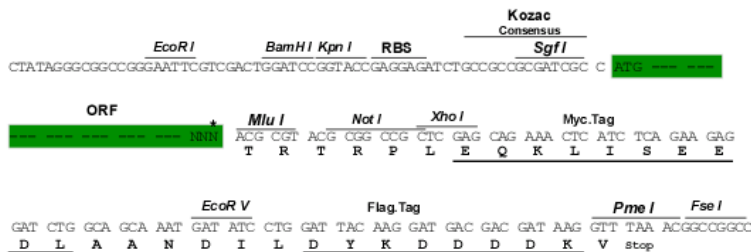
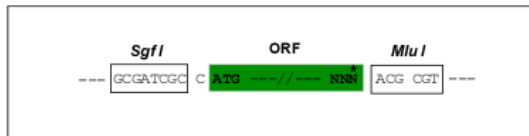
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9024_a10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_133189

ORF Size: 825 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_133189.5](#)

RefSeq Size: 828 bp

RefSeq ORF: 828 bp

Locus ID: 81904

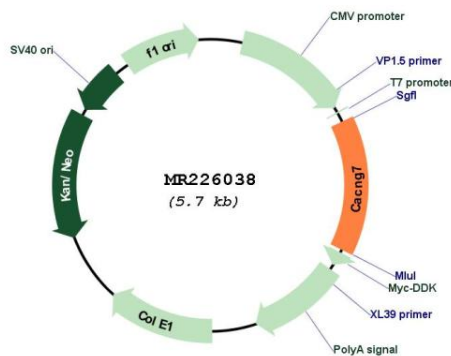
UniProt ID: [P62956](#)

Cytogenetics: 7 1.95 cM

MW: 31.5 kDa

Gene Summary: Regulates the activity of L-type calcium channels that contain CACNA1C as pore-forming subunit (By similarity). Regulates the trafficking and gating properties of AMPA-selective glutamate receptors (AMPA-Rs). Promotes their targeting to the cell membrane and synapses and modulates their gating properties by slowing their rates of activation, deactivation and desensitization and by mediating their resensitization (By similarity). Shows specificity only for GRIA1 and GRIA2 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226038