OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC229720

Cacna1c (NM_001255998) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna1c (NM_001255998) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cacna1c
Synonyms:	Cav1.2; Cchl1a1; D930026N18Rik; MBC; MELC-CC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

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>MC229720 representing NM_001255998
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATTCGGGCCTTTGTTCAGCCATCCACACCCCCATACCAGCCACTCTCCAGTCACTCGTCTGAGGAAA
CAGAGAGGAAGTTCAAGGGCAAGGTGGTACATGAAGCTCAACTCAACTGTTTCTACATTTCTCCTGGAGG
TTCCAACTATGGGAGCCCACGCCCAGCTCATGCCAACATGAATGCCAATGCAGCTGCAGGACTTGCTCCC
GAGCACATCCCTACTCCAGGGGCAGCACTGTCCTGGCAGGCAGCCATCGATGCCGCCCGGCAGGCCAAGC
TCATGGGCAGTGCTGGCAACGCAACCATCTCTACCGTCAGTTCCACACAGCGGAAGCGGCAGCAGTATGG
GAAACCCAAGAAGCAGGGGGGCACAACCGCCACACGGCCGCCCCGGGCTCTGCTGTGTCTGACCCTGAAG
AACCCTATCCGGAGGGCGTGCATAAGCATTGTTGAATGGAAACCATTTGAAATCATTATTTTACTGACTA
TTTTTGCCAATTGTGTGGCCTTAGCAATCTATATTCCCTTTCCGGAAGACGACTCCAACGCCACCAACTC
CAACCTGGAACGAGTGGAGTATCTCTTCCTCATCATTTTTACCGTGGAAGCATTTTTAAAAGTAATTGCC
TACGGACTTCTCTTCCACCCCAACGCTTACCTCCGCAATGGTTGGAATTTACTGGATTTTATAATCGTGG
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TTGTGCTCTTCGTCATCATCATTTATGCTATTATCGGCCTGGAGCTCTTCATGGGAAAGATGCACAAGAC
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CCAACTTCGACAACTTCGCCTTCGCCATGCTGACGGTGTTCCAGTGTATCACCATGGAGGGCTGGACAGA
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CCTGGACTGGATCACCCAGGCAGAAGACATTGACCCCGAGAATGAGGACGAGGGCATGGATGAAGACAAG
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CCTCGAAACAGAGGCGCTCCAGCGGGCTTGCATGATCAGAAGAAAGGGAAGTTTGCTTGGTTTAGTCACT
CTACAGAAACCCATGTGAGCATGCCCACAAGTGAGACTGAGTCTGTCAACACTGAAAACGTGGCTGGAGG
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TGGCGCAGGTGGAATCGATTCTGCAGAAGAAAATGCCGTGCAGCAGTTAAGTCCAACGTCTTCTACTGGC
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AAGGGTTACTTTAGTGATCCCTGGAATGTTTTTGACTTCCTCATCGTCATTGGGAGCATAATTGATGTCA
TTCTCAGTGAGACTAATCCAGCTGAACATACCCAATGCTCTCCCTCTATGAGTGCAGAGGAGAACTCCCG
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GTCATGTTCAATGCTACCCTGTTTGCCCTCGTCAGGACAGCCCTGAGGATCAAAACAGAAGGGAACCTAG
AGCAAGCCAATGAGGAGCTTCGGGCCATCATCAAGAAAATCTGGAAGAGGACTAGCATGAAGCTGTTGGA
CCAGGTGGTGCCCCCTGCAGGCGATGACGAGGTCACAGTGGGCAAGTTCTATGCCACCTTCCTGATCCAA
GAGTACTTCAGGAAATTCAAGAAGCGAAAAGAGCAGGGGCTGGTGGGCAAGCCCTCACAAAGGAATGCAC

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TGTCCCTCCAGGCTGGCTTGCGCACCTTGCATGACATTGGGCCTGAGATCCGGCGGGCCATCTCTGGGGA
TCTGACTGCTGAGGAGGAGTTGGACAAGGCTATGAAGGAGGCGGTGTCTGCTGCCTCCGAAGATGACATC
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CACACCCCCTGTCACTCCAGGCAGCCGGGGCAGACCCCTACGGCCCATCCCTACCCTACGGCTGGAGGGG
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CAGCCTGTAGTGGGAGCAGCAGCATGGCCCGGAGAGCCCGGCCCGTCTCCCTCACCGTGCCCAGCCAGGC
TGGAGCTCCAGGGAGACAGTTCCATGGCAGTGCCAGCAGCCTGGTGGAAGCGGTCTTGATTTCAGAAGGA
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TGACAATAGAGGAGATGGAGAACGCCGCAGACAACATCCTCAGTGGGGGCGCCCAGCAGAGCCCCAACGG
CACCCTCTTACCTTTTGTGAACTGCAGGGACCCGGGGCAGGACAGGGCTGTGGCCCCAGAGGACGAGAGC
TGCGCATATGCCCTGGGGCGAGGCCGGAGCGAGGAGGCGCTCGCGGACAGCAGGTCCTACGTCAGCAACC
TGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001255998

Insert Size: 6585 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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_001255998.2, NP_001242927.1

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RefSeq Size:	13415 bp
RefSeq ORF:	6585 bp
Locus ID:	12288
Cytogenetics:	6 55.86 cM
Gene Summary:	Pore-forming, alpha-1C subunit of the voltage-gated calcium channel that gives rise to L-type calcium currents (PubMed:14609949, PubMed:18586882, PubMed:21216955, PubMed:25368181, PubMed:28119464). Mediates influx of calcium ions into the cytoplasm, and thereby triggers calcium release from the sarcoplasm (By similarity). Plays an important role in excitation-contraction coupling in the heart. Required for normal heart development and normal regulation of heart rhythm (PubMed:21216955). Required for normal contraction of smooth muscle cells in blood vessels and in the intestine. Essential for normal blood pressure regulation via its role in the contraction of arterial smooth muscle cells (PubMed:14609949, PubMed:28119464). Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group (Probable).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (6) has multiple differences in the coding region but maintains the reading frame, compared to variant 1. This variant encodes isoform 6, which is longer than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.

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