

Product datasheet for **MC223740**

Cacna2d2 (NM_001174048) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna2d2 (NM_001174048) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cacna2d2
Synonyms:	a2d2; Cacna2d; du; mKIAA0558; td; torpid
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223740 representing NM_001174048 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGCCGGCTCGGACCTGCGGGCTTCTTGGCCCGGCCGGTGGGACCGCTCGCCCTGGCCCG
GTCGCGGCCCGGCCCTGCCCTGACCCCGGGGCCAGCGTCCGGGCCCGCACGCCGCTTGTCTTT
GCTGCCGCTCTGTTGCTTTTACCCTGCTCACCGCCCGGGCCTCTGCCTACAGTTCCCCAGCAG
CACACGATGCAGCACTGGGCCCGGCCCTGGAGCAGGAGATTGACGGTGTGATGCGGATTTTGGAGGCG
TGCAGCAGCTCCGAGAGATCTACAAGACAATCGGAACCTGTTTGAAGTGCAGGAGAATGAACCACAGAA
ATTGGTGGAGAAAGTGGCAGGGGACATCGAGAGCCTGCTGGACAGGAAGTCCAGGCCCTGAAGAGACTG
GCTGACGCTGCAGAGAATTTCCAGAAAGCCCATCGCTGGCAGGACAACATCAAGGAGGAAGACATCATGT
ACTACGATGCCAAGGCTGACGCCGAGCTGGATGACCCTGAGAGTGAAGATATGGAGAGGGATCCAAGAC
CAGCGCCTTAAGGCTGGACTTCATCGAGGACCCAACTTCAAGAACAAAGTCAACTATTCATACACGGCT
GTGCAGATCCCCACAGACATCTACAAAGGCTCTACCGTCATCCTCAATGAGCTTAACTGGACAGAGGCC
TGGAGAACGTCTTCATTGAGAACCGTAGCAAGACCCTACACTGTTGTGGCAAGTCTTGGCAGTGCCAC
GGGAGTCACTCGCTATTACCCAGCCACACCATGGCGAGCCCCAAGAAGATTGACCTGTACGATGTCAGA
AGACGACCCTGGTATATACAGGGGCCCTCATACCCAAGGACATGGTTCATTGAGTGTGAGTGGCA
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TGAATGTGAACGTGGCCTCATTCAACGAGAAGGCGCAGCCTGTGTCTTGTTCACACACCTGGTGCAG
GCCAATGTGCGTAAAGAAGGTGTTCAAGGAAGCTGTGCAGGGCATGGTGGCCAAGGGCACCACAGGCT
ACAAGGCCGGCTTTGAGTATGCCTTTGACCAGCTACAGAATCCAACATCACGCGGGCTAACTGCAATAA
GATGATCATGATGTTACGGATGGGGGTGAGGATCGCGTGCAGGATGTCTTCGAAAAGTACAATTGGCCC
AATCGGACGGTACGTGTGTTACGTTCTCCGTAGGACAGCATAACTATGATGTACACCCCTGCAGTGGA
TGGCCTGTACTAACAAAGTTACTATTTTGGATCCCTTCCATCGGAGCCATCCGCATCAACACACAGGA
ATACCTGGATGTGCTGGGTAGGCCCATGGTACTGGCAGGCAAGGACGCCAAGCAAGTGAATGGACAAC



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GTGTATGAAGATGCACTGGGGCTGGGGTTGGTGGTAACAGGAACTCTCCCTGTTTTCAACCTGACACAGG
ATGGCCCTGGGGAAAAGAAGAACCAGTTAATCCTGGGTGTATGGGCATCGATGTGGCCTTGAATGACAT
CAAAGGCTGACTCCCAACTACACACTCGGCGCAATGGCTATGTGTTCCGCATCGACCTGAACGGCTAC
GTGTTGCTACATCCCAATCTCAAGCCCCAGACTACCAACTCCGGGAGCCTGTGACCTTGGACTTCTCGG
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GCAGATCAGAACCTTGGTCAAATCCCTGGATGAGAGGTACATAGACGAAGTGATTCCGAACTACACCTGG
GTGCCTATAAGGAGTACCAACTACAGCTGGGGCTGGTGTCCACCCCTACAGCACCTACTACCTCCAAG
CCAACCTCAGCGACCAGATCCTGCAGGCAAGTATTTTGTAGTTCCTGCTTCCAGCAGCTTTGAGTCTGA
AGGACACGTTTTTCATTGCTCCGAGAGAGTATTGCAAGGACTTGAACGCCTCGGACAAACAACCCGAGTTC
CTGAAGAACTTTCATCGAGCTCATGGAGAAAGTACTCCGGACTCCAAGCAGTGTAACTCCTTCTTCTC
ATAACTTGATTCTGGACACGGGCATTACACAGCAGTTAGTGGAACGTGTGTGGCGGGACCAAGATCTCAA
CACGTACAGCCTGCTAGCCGATTTTGTGCCACTGATGGTGGCATCACACGTGTCTTCCGAAACAAGGCA
GCCGAAAGACTGGACAGAAAACCCTGAACCCTTCAATGCCAGCTTCTACCGTCGCAGCCTGGATAACCATG
GTTATATCTTCAAGCCCCACACCAGGACTCCCTGTTAAGACCACTGGAGCTGGAGAATGACACAGTAGG
TGTCTCGTCAGCACAGCTGTGGAGCTCAGTCTAGGTCGTCGCACACTGAGGCCAGCAGTGGTGGGTGTC
AAACTGGACCTAGAGGCTTGGGCTGAAAAGTTC AAGGTGCTGGCCAGCAACCGTACCCATCAGGACCAAC
CTCAGAAGCAGTGC GGCCCCAGCAGCCACTGTGAGATGGACTGCGAGGTTAAACAAGGAGTCTACTCTG
TGTCTCATTGATGACGGAGGGTTCCTGGTGTGTCAAACCAGAACCATCAGTGGGACCAGGTTGGCAGA
TTCTTCAGTGAGGTGGATGCCAACCTGATGCTGGCACTGTACAATAACTCCTTCTACACCCGAAAGGAAT
CCTATGACTATCAGGCAGCCTGTGCCCTCAGCCTCCTGGGAACCTGGGTGCTGCACCCCGGGGTGTCTT
TGTGCCACCATTGCAGATTTCCCTTAACCTGGCCTGGTGGACCTCTGCTGCCCTGGTCTTATCCAG
CAGTACTCTATGGTCTCATCTATCACAGCTGGTCCAGGCAGACCCGGCAGAAAGCTGAGGGCAGCCCCG
AGACGCGGAGAGCAGCTGCGTCATGAAACAGACCCAGTACTACTTCGGCTCGGTGAACGCATCTATAA
TGCCATCATTGACTGCGGAAACTGCAGCAGGCTGTTCCATGCGCAGAGACTGACCAACACCAATCTCTG
TTCGTGGTGGCCGAGAAGCCGCTGTGCAGCCAGTGCAGGCGGGCCGGCTGCTGCAGAAGGAGACACACT
GCCAGCGGACGGCCCGGAGCAGTGTGAGCTGGTGCAGAGACCGAGATACCGAAGAGGTCCGCACATCTG
TTTTGACTACAATGCGACGGAAGATACCTCAGACTGTGGCCGGGAGCCTCCTTCCCTCCGTCGCTGGGC
GTCTTGGTTTCTTGCAGCTTTTGTCTCCTGGGCTGCCACCTCGGCCGAGCCTCAAGTCCACTCCT
TCGCTGCCTCTGCCACCTGA
    
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_001174048

Insert Size:

3453 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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:	<u>NM_001174048.1, NP_001167519.1</u>
RefSeq Size:	5521 bp
RefSeq ORF:	3453 bp
Locus ID:	56808
Cytogenetics:	9 58.02 cM
Gene Summary:	<p>The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Acts as a regulatory subunit for P/Q-type calcium channel (CACNA1A), N-type (CACNA1B), L-type (CACNA1C OR CACNA1D) and possibly T-type (CACNA1G).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (3) lacks an alternate in-frame exon and uses an alternate in-frame splice site, compared to variant 1. The resulting isoform (3) lacks two internal segments, compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>