

## Product datasheet for MC223767

### Cacna2d2 (NM\_020263) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna2d2 (NM_020263) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cacna2d2
Synonyms:	a2d2; Cacna2d; du; mKIAA0558; td; torpid
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223767 representing NM_020263 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGTGCCGGCTCGGACCTGCGGCGCTTCTTGGCCCGGCCGGTGCGGACCGCTCGCCCTGGCCCG  
GTCGCGGCCCGGCCCTGCCCTGACCCCGGGGCCAGCGTCCGGGCCCGCACGCCGCTTTGCTCTT  
GCTGCCGCTCTGTTGCTTTACCGCTGCTCACGCCCGCGCCTCTGCCTACAGCTTCCCCAGCAG  
CACACGATGCAGCACTGGGCCCGCGCCTGGAGCAGGAGATTGACGGTGTGATGCGGATTTTGGAGGCG  
TGACGAGCTCCGAGAGATCTACAAGGACAATCGGAACCTGTTTGAAGTGACAGGAGAATGAACCACAGAA  
ATTGGTGGAGAAAGTGGCAGGGGACATCGAGAGCCTGCTGGACAGGAAGGTCCAGGCCCTGAAGAGACTG  
GCTGACGCTGCAGAGAAATTTCCAGAAAGCCATCGCTGGCAGGACAACATCAAGGAGGAAGACATCATGT  
ACTACGATGCCAAGGCTGACGCCGAGCTGGATGACCTGAGAGTGAAGATATGGAGAGGGGATCCAAGAC  
CAGCGCCTTAAGGCTGGACTTCATCGAGGACCCAACTCAAGAACAAGTCAACTATTCATACACGGCT  
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GGGAGTCACTCGCTATTACCCAGCCACACCATGGCGAGCCCAAGAAGATTGACCTGTACGATGTCAGA  
AGACGACCCTGGTATATACAGGGGCTCATACCCCAAGGACATGGTCATCATTGTGGATGTGAGTGGCA  
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GCCAATGTGCGTAACAAGAAGGTGTTCAAGGAAGCTGTGCAGGGCATGGTGGCAAGGGCACCACAGGCT  
ACAAGGCCGCTTTGAGTATGCCTTTGACCAGCTACAGAATCCAACATCACGCGGGCTAACTGCAATAA  
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GTGATGAAGATGCACTGGGGCTGGGGTGGTGGTAAACAGGAACCTCCCTGTTTCAACCTGACACAGG



ATGGCCCTGGGGAAAAGAAGAACCAGTTAATCCTGGGTGTCATGGGCATCGATGTGGCCTGAATGACAT  
 CAAAAGGCTGACTCCCAACTACACACTCGGCGCCAATGGCTATGTGTTGCCATCGACCTGAACGGCTAC  
 GTGTTGTACATCCCAATCTCAAGCCCCAGACTACCAACTCCGGGAGCCTGTGACCTTGGACTTCTTG  
 ACGCAGAGCTGGAAGATGAGAACAAGGAGGAGATCCGTCGCAGCATGATTGACGGCGACAAAGGCCACAA  
 GCAGATCAGAACCTTGGTCAAATCCCTGGATGAGAGGTACATAGACGAAGTGATTGGAACCTACACCTGG  
 GTGCCTATAAGGAGTACCAACTACAGCCTGGGGCTGGTGTCTCCACCTACAGCACCTACTACCTCCAAG  
 CCAACCTCAGCGACCAGATCCTGCAGGCAAGTTGCCAATCAGCAAACCTGAAGGATTTTGGATTCTGTCT  
 TCCCAGCAGCTTTGAGTCTGAAGGACACGTTTTTCATTGCTCCGAGAGAGTATTGCAAGGACTTGAACGCC  
 TCGGACAACAACACCGAGTTCCTGAAGAACTTCATCGAGCTCATGGAGAAAGTGACTCCGGACTCCAAGC  
 AGTGTAATAAATTCTTCTTATAAATTGATTCTGGACACGGGCATTACACAGCAGTTAGTGAACGTGT  
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 CGTGTCTTCCCGAACAAGGCAGCCGAAGACTGGACAGAAAACCTGAACCTTCAATGCCAGCTTCTACC  
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 AGGCCAGCAGTGGTGGGTGTCAAACCTGGACCTAGAGGCTTGGGCTGAAAAGTTCAAGGTGTGGCCAGCA  
 ACCGTACCCATCAGGACCAACCTCAGAAGTGGCGCCCAGCAGCCACTGTGAGATGGACTGCGAGGTTAA  
 CAACGAGGATCTACTCTGTGTCCTCATTGATGACGGAGGGTTCCTGGTGTGTCAAACCAGAACCATCAG  
 TGGGACCAGGTTGGCAGATTCTTCAAGTGGGATGCCAACCTGATGCTGGCACTGTACAATAACTCCT  
 TCTACACCCGAAAGGAATCCTATGACTATCAGGCAGCCTGTGCCCTCAGCCTCCTGGGAACCTGGGTGC  
 TGCACCCCGGGGTGTCTTTGTGCCACCATTCAGATTTCCTTAACTTGGCCTGGTGGACCTCTGCTGCC  
 GCCTGGTCTTATTCCAGCAGCTACTCTATGGTCTCATCTATCACAGTGGTCCAGGCAGACCCGGCAG  
 AAGCTGAGGGCAGCCCCGAGACGCGGAGAGCAGCTGCGTCATGAAACAGACCCAGTACTACTTCGGCTC  
 GGTGAACGCATCCTATAATGCCATCATTGACTGCGGAAACTGCAGCAGGCTGTTCCATGGCGAGAGACTG  
 ACCAACACCAATCTCCTGTTTCGTGGTGGCCGAGAAGCCGCTGTGCAGCCAGTGCGAGGCCGGGCCGCTGC  
 TGCAAGAGGAGACACACTCGGACGGCCCGAGCAGTGTGAGCTGGTGCAGAGACCAGATACCGAAGAGG  
 TCCGCACATCTGTTTGGACTACAATGCGACGGAAGATACCTCAGACTGTGGCCGCGGAGCCTCCTCCCT  
 CCGTCGCTGGGCGTCTTGGTTTCTTGCAGCTTTTGTCTCCTGGGCTGCCACCTCGGCCGAGCCTC  
 AAGTCCACTCCTTCGCTGCCTCTCGCCACCTCTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_020263
- Insert Size:** 3465 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).
- 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\\_020263.3](#), [NP\\_064659.2](#)

**RefSeq Size:** 5533 bp

**RefSeq ORF:** 3465 bp

**Locus ID:** 56808

**UniProt ID:** [Q6PHS9](#)

**Cytogenetics:** 9 58.02 cM

**Gene Summary:** 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]  
Transcript Variant: This variant (2) uses an alternate in-frame splice site, compared to variant 1. The resulting isoform (2) lacks a 2-aa internal segment, 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.