

## Product datasheet for MC223090

### Cacna2d2 (NM\_001174047) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna2d2 (NM_001174047) 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:	>MC223090 representing NM_001174047 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGGATCGCC

ATGGCGGTGCCGGCTCGGACCTGCGGCGCTTCTTGCCCGGCCCGGTGCGGACCGCTCGCCCTGGCCCG  
GTCGCGGCCCGGCCCTGCCCTGACCCCGGGGCCAGCGTCCGGGCCCGCACGCCGCTTTGCTCTT  
GCTGCCGCTCTGTTGCTTTACCGCTGCTCACCGCCCGGCGCCTCTGCCTACAGTTCCCCAGCAG  
CACACGATGCAGCACTGGGCCCGGCGCTGGAGCAGGAGATTGACGGTGTGATGCGGATTTTGGAGCGG  
TGACGAGCTCCGAGAGATCTACAAGGACAATCGGAACCTGTTTGAAGTGCAGGAGAATGAACCACAGAA  
ATTGGTGGAGAAAGTGGCAGGGGACATCGAGAGCCTGCTGGACAGGAAGGTCCAGGCCCTGAAGAGACTG  
GCTGACGCTGCAGAGAAATTCAGAAAGCCATCGCTGGCAGGACAACATCAAGGAGGAAGACATCATGT  
ACTACGATGCCAAGGCTGACGCCGAGCTGGATGACCCTGAGAGTGAAGATATGGAGAGGGGATCCAAGAC  
CAGCGCCTTAAGGCTGGACTTCATCGAGGACCCAACTCAAGAACAAGTCAACTATTCATACACGGCT  
GTGCAGATCCCCACAGACATCTACAAGGCTCTACCGTCATCCTCAATGAGCTTAACTGGACAGAGGCC  
TGGAGAACGTCTTCAATTGAGAACCCTAGGCAAGCCCTACACTGTTGTGGCAAGTCTTTGGCAGTGCCAC  
GGGAGTCACTCGCTATTACCCAGCCACACCATGGCGAGCCCAAGAAGATTGACCTGTACGATGTCAGA  
AGACGACCCTGGTATATACAGGGGCTCATACCCCAAGGACATGGTCATCATTGTGGATGTGAGTGGCA  
GCGTGAGCGCCCTGACTCTGAAGCTGATGAAGACGTCCTGCTGTGAGATGCTAGACACGCTCTCTGATGA  
TGACTATGTGAACGTGGCCTCATTCAACGAGAAGGCGCAGCCTGTGTCTTGCTTACACACCTGGTGCAG  
GCCAATGTGCGTAACAAGAAGGTGTTCAAGGAAGCTGTGCAGGGCATGGTGGCAAGGGCACCACAGGCT  
ACAAGGCCGCTTTGAGTATGCCTTGACCAGCTACAGAATCCAACATCACGCGGGCTAACTGCAATAA  
GATGATCATGATGTTACGGATGGGGGTGAGGATCGCGTGCAGGATGTCTTCGAAAAGTACAATTGGCCC  
AATCGGACGGTACGTGTGTTACGTTCTCCGTAGGACAGCATAACTATGATGTCACACCCTGCAGTGG  
TGGCCTGTACTAACAAGGTTACTATTTGAGATCCCTTCCATCGGAGCCATCCGCATCAACACACAGGA  
ATACCTGGATGTGCTGGGTAGGCCCATGGTACTGGCAGGCAAGGACGCCAAGCAAGTGAATGGACAAAC  
GTGATGAAGATGCACTGGGGCTGGGGTGGTGGTAAACAGGAACTCTCCCTGTTTCAACCTGACACAGG



```

ATGGCCCTGGGGAAAAGAAGAACCAGTTAATCCTGGGTGTCATGGGCATCGATGTGGCCTGAATGACAT
CAAAGGCTGACTCCCAACTACACACTCGGCGCAATGGCTATGTGTTGCCATCGACCTGAACGGCTAC
GTGTTGTACATCCCAATCTCAAGCCCCAGACTACCAACTCCGGGAGCCTGTGACCTTGGACTTCTTG
ACGCAGAGCTGGAAGATGAGAACAAGGAGGAGATCCGTCGCAGCATGATTGACGGCGACAAAGGCCACAA
GCAGATCAGAACCTTGGTCAAATCCCTGGATGAGAGGTACATAGACGAAGTGATTGGAACCTACACCTGG
GTGCCTATAAGGAGTACCAACTACAGCCTGGGGCTGGTGTCCCACCCTACAGCACCTACTACCTCCAAG
CCAACTCAGCGACCAGATCCTGCAGGCAAGTTGCCAATCAGCAAACCTGAAGGATTTTGGATTCTGTGCT
TCCCAGCAGCTTTGAGTCTGAAGGACACGTTTTTCATTGCTCCGAGAGAGTATTGCAAGGACTTGAACGCC
TCGGACAACAACACCGAGTTCCTGAAGAACTTCATCGAGCTCATGGAGAAAGTGACTCCGGACTCCAAGC
AGTGTAATAAATTCTTCTTATAAATTGATTCTGGACACGGGCATTACACAGCAGTTAGTGAACGTGT
GTGGCGGGACCAAGATCTCAACACGTACAGCCTGCTAGCCGATTTTGTGCCACTGATGGTGGCATTACA
CGTGTCTTCCCGAAACAAGGCAGCCGAAGACTGGACAGAAAACCCCTGAACCTTCAATGCCAGCTTCTACC
GTCGCAGCCTGGATAACCATGGTTATATCTTCAAGCCCCACACCAGGACTCCCTGTTAAGACCACTGGA
GCTGGAGAATGACACAGTAGGTGTCTCGTCAGCACAGCTGTGGAGCTCAGTCTAGTCTGTCGCACACTG
AGGCCAGCAGTGGTGGGTGTCAAACCTGGACCTAGAGGCTTGGGCTGAAAAGTTCAAGGTGTGGCCAGCA
ACCGTACCATCAGGACCAACCTCAGAAGTGGCGCCCAGCAGCCACTGTGAGATGGACTGCGAGGTTAA
CAACGAGGATCTACTCTGTGCCTCATTGATGACGGAGGGTTCCTGGTGTGTCAAACCAGAACCATCAG
TGGGACCAGGTTGGCAGATTCTTCAAGTGGAGGTGGATGCCAACCTGATGCTGGCACTGTACAATAACTCCT
TCTACACCCGAAAGGAATCCTATGACTATCAGGCAGCCTGTGCCCTCAGCCTCCTGGGAACCTGGGTGC
TGCACCCCGGGGTGTCTTTGTGCCACCATTCAGATTTCCTTAACTTGGCCTGGTGGACCTCTGCTGCC
GCCTGGTCTTATTCCAGCAGCTACTCTATGGTCTCATCTATCACAGTGGTCCAGGCAGACCCGGCAG
AAGCTGAGGGCAGCCCCGAGACGCGGAGAGCAGCTGCGTCATGAAACAGACCCAGTACTACTTCGGCTC
GGTGAACGCATCCTATAATGCCATCATTGACTGCGGAAACTGCAGCAGGCTGTTCCATGCCAGAGACTG
ACCAACACCAATCTCCTGTTTCGTGGTGGCCGAGAAGCCGCTGTGCAGCCAGTGCGAGGCCGGCCGGCTGC
TGAGAAGGAGACACACTGCCAGCGGACGCGCCGGAGCAGTGTGAGCTGGTGCAGAGACCAGATACCG
AAGAGGTCGCGACATCTGTTTTGACTACAAATGCGACGGAAGATACCTCAGACTGTGGCCGCGGAGCTCC
TTCCCTCCGTCGCTGGGCGTCTTGGTTTCTTGCAGCTTTTGTCTCCTCCTGGGCTGCCACCTCGGCCG
AGCCTCAAGTCCACTCCTTCGCTGCCTCTGCCACCTCTGA

```

**ACGGCT**ACGGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001174047
- Insert Size:** 3471 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\\_001174047.1](#), [NP\\_001167518.1](#)

**RefSeq Size:** 5539 bp

**RefSeq ORF:** 3471 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 (1) represents the longest transcript and encodes the longest 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.