

## Product datasheet for **MC229718**

### Cacna1d (NM\_001302637) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna1d (NM_001302637) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cacna1d
Synonyms:	8430418G19Rik; C79217; Cach3; Cacn; Cacn4; Cacn1a2; Cav1.3; Cchl; Cchl1; Cchl1a; Cchl1a2; D-LTC; D-LTCC
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC229718 representing NM_001302637 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGATGATGATGATGATGAAAAAATGCAACATCAACGGCAGCACCAAGAGGACCATGCGAACGAGG  
CAAACATGCAAGAGGCACCAGACTCCCTATTTCTGGTGAAGGACCAACTTCTCAGCCCAACAGCTCCAA  
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CGCAATGGCACGGAATGTAGGAGTGGCTGGGTTGGCCCAATGGAGGCATCACTAACTTTGATAACTTT  
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ACTCTCTGGTGTGGTGGAAAAGAAGAGGCGCGGCCAAGACCGGGCCCTCTGGGTGTGGCGGTGGGGT  
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TGCTTGAAACCATGTCAATCATGTTAATAGTGATAGGAGAGATTCCCTTCAGCAGACCAATACCACCCA  
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 CAGCCTGGTGGAGGCAGTCTGATATCCGAAGGCTTGGGACGCTACGCGAGGGACCCCAATTTGTCTCA  
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 GATGAGATGATTTGCATTACCACCTTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001302637
- Insert Size:** 6540 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\\_001302637.1](#), [NP\\_001289566.1](#)
- RefSeq Size:** 9180 bp

RefSeq ORF: 6540 bp

Locus ID: 12289

UniProt ID: [Q99246](#)

Cytogenetics: 14 18.43 cM

**Gene Summary:** This gene encodes a pore-forming subunit of the L-type, voltage-activated calcium channel family. These channels have been found to play a role in heart and smooth muscle contraction and in the transmission of auditory information. Homozygous knockout mice for this gene exhibit deafness and heart defects. These channels have also been linked to mitochondrial oxidative stress in a mouse model of Parkinson's disease. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Nov 2014]  
Transcript Variant: This variant (3) represents the longest transcript and encodes the longest isoform (3).