

## Product datasheet for MR222817

### Cacna2d1 (NM\_001110845) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cacna2d1 (NM\_001110845) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cacna2d1  
**Synonyms:** Ca(v)alpha2delta1; Cac; Cacna2; Cchl; Cchl2a  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR222817 representing NM\_001110845  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGGATCGCC

ATGGCTGCTGGCTGCCTGCTGGCCTTGACTCTGACACTTTTCCAATCTGGGCTGATCGGCCCTCGAGCG  
 AGGAGCCCTTCCCTTCGCCGCTCACTATCAAGTCATGGGTGGACAAGATGCAAGAAGACCTTGTCACACT  
 GGCAAAAACAGCAAGTGGAGTGACTCAGCTTGCTGATATTTATGAAAAATACCAAGATTTGTATACTGTG  
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 CTAAGGCCCTGGTGCCTGGCTATGGAAGCAGAGAAAAGTCCAAGCAGCCACCAATGGAGGGAAGATTT  
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 GGCAGCCAACGGATTAACCTGTTTTATTGAAGATGCTAATTTTGGACGTGAGATATCCTATCAGCATG  
 CAGCGGTCCATATCCCACGGACATCTATGAGGGCTCAACCATAGTGTTAAACGAACTCAACTGGACAAG  
 TGCCTTAGATGAAGTATCAAAGAAAATCGAGACGAAGACCCTACACTGCTGTGGCAAGTGTGGCAGC  
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 GGTGGACGTGAGTGAAGTGTGAGCGGATTGACTCTGAAACTCATCCGAACATCTGTCTCCGAGATGTTA  
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 CAACGTCCTGGCAATCTGAAAATAAGACAAACTTGAAGAACCAGTTGATTCTTGGTGTGATGGCGGT  
 GATGTGCTCTGGAAGATATCAAGAGATTGACACCACGTTTTACTCTGTCCCAATGGCTACTATTTTG



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CAATTGATCCTAATGGCTATGTCTTATTGCATCCAAATCTTCAGCCAAAGGAGCCAGTCACACTGGATT  
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GCATGATGAGACACCTGGTTAATATACACTTTATGCATTCAACAAATCATATGACTATCAGTCCGTGTG  
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TCCTTTGGCTGGTATCTGGCAGCAGACTACCTACTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR222817 representing NM\_001110845

Red=Cloning site Green=Tags(s)

MAAGLLALTLFQSLIGPSSEEPFSPVTIKSWDKMQEDLVTLAKTASGVTQLADIYEKYQDLTYV  
EPNNARQLVEIAARDIEKLLSNRSKALVRLAMEAEKVQAAHQWREDFASNEVVVYNAKDDLPERNESEP  
GSQRIKPVFIEDANFGRQISYQHAAVHIPTDIYEGSTIVLNELNWTLSALDEVFKRNRDEDPTLLWQVFGS  
ATGLARYYPASPWVNSRTPNKIDLYDVRRRPWYIQGAASPKDMLILVDVSGSVSGLTLKLIKRTSVSEML  
ETLSDDDFVNVASFNSNAQDVSCFQHLVQANVRNKKVLDVANNITAKGITDYKKGFSFAFEQLLNYNVS  
RANCNKIIMLFTDGGEEAQQEIFAQYKNDKKVRVFTFSVGQHNYDRGPIQWMACENKGYYYEIPSIGAIR  
INTQEYLDVLRPMVLADKAKQVQWNTNLYLDALELGLVITGTLPVFNVTGQSENKTNLKNQLILGVMGV  
DVSLEDIKRLTPRFTLCPNGYFPAIDPNGYVLLHPNLQPKPVTLDLDAELENEIKVEIRNKMIDGESG  
EKTFRTLKVSQDERYIDKGNRTYTWPNVNGTDYSLALVLPYTSFYIYKAKLEETITQARSKKGMKDSET  
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NYWSKQKNIKGVKARFVVDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGA  
YESGIMVSKAVELYIQGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCDCRNSDVMDCVILDDGG  
FLLMANHDDYTNIQRFFGEIDPSMMRHLVNIISLYAFNKSYDYQSVCDPGAAPKQAGHRSAYVPSIADI  
LQIGWWATAAAWSILQQLLLSLTFPRLLEAVEMEEDDFTASLSKQSCITEQTQYFFKNDTKSFGLLDCG  
NCSRFHVEKLMNTNLVFMVESKGTCPDTRLLMQAEQTSDDGPDPCDMVKQPRYRKGPDVCFDNNVLED  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

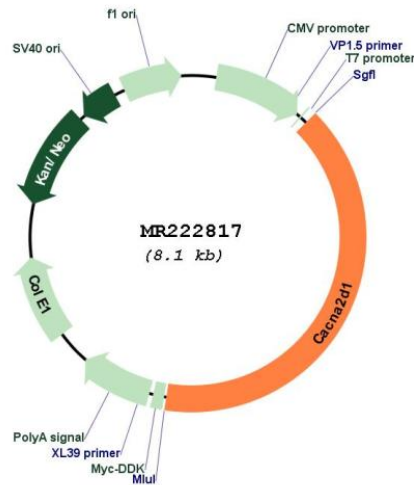
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001110845

ORF Size: 3258 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001110845.1, NP_001104315.1</u>
<b>RefSeq Size:</b>	7421 bp
<b>RefSeq ORF:</b>	3261 bp
<b>Locus ID:</b>	12293
<b>UniProt ID:</b>	<u>O08532</u>
<b>Cytogenetics:</b>	5 6.56 cM
<b>MW:</b>	123.2 kDa
<b>Gene Summary:</b>	This gene encodes a regulatory component of the voltage-dependent calcium channel complex. The product of this gene is a proprotein that is proteolytically processed into alpha-2 and delta subunits, which are linked by a disulfide bond. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jan 2013]