

## Product datasheet for **MG222819**

### Cacna2d1 (NM\_001110846) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna2d1 (NM_001110846) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cacna2d1
Synonyms:	Ca(v)alpha2delta1; Cac; Cacna2; Cchl; Cchl2a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222819 representing NM_001110846 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGCTGGCTGCCTGCTGGCCTTGACTCTGACACTTTTCCAATCTGGGCTGATCGGCCCTCGAGCG  
AGGAGCCCTTCCCTTCGCCCGTCACTATCAAGTCATGGGTGGACAAGATGCAAGAAGACCTTGTCACT  
GGCAAAAACAGCAAGTGGAGTGACTCAGCTTGTGATTTATGAAAAATACCAAGATTTGTATACTGTG  
GAGCCCAACAATGCACGCCAAGTGGTTGAAATTCAGCCCGAGACATTGAGAAGCTTCTAAGCAACAGAT  
CTAAGGCCCTGGTGCCTGGCTATGGAAGCAGAGAAAGTCCAAGCAGCCACCAATGGAGGGAAGATTT  
TGCAAGCAATGAAGTTGTCTACTATAATGCTAAGGATGATCTTGATCCTGAAAGAAATGAGAGTGAGCCA  
GGCAGCCAACGGATTAACCTGTTTTATTGAAGATGCTAATTTTGGACGTGAGATATCCTATCAGCATG  
CAGCGGTCATATTTCCACGGACATCTATGAGGGCTCAACCATAGTGTTAAACGAACTCAACTGGACAAG  
TGCCCTTAGATGAAGTATTCAAAAGAAATCGAGACGAAGACCCTACACTGCTGTGGCAAGTGTGGCAGC  
GCCACTGGCCTGGCCGATATTATCCAGCTTCCATGGGTGGATAATAGTAGAACTCCAAAAGATTG  
ATCTATATGATGTACGCAGAAGACCATGGTACATCCAGGGAGCTGCATCCCCAAGGACATGCTCATTCT  
GGTGGACGTGAGTGAAGTGTGAGCGGATTGACTCTGAAACTCATCCGAACATCTGTCTCCGAGATGTTA  
GAAACCCTCTCTGATGATGATTTCTGTAATGTAGCTTCAATTAACAGCAACGCTCAGGATGTAAGCTGTT  
TCCAGCACCTGGTTCAAGCGAATGTAAGAAATAAGAAAGGTGTTGAAAGATGCCGTGAATAACATTACAGC  
AAAGGGGATCACAGATTACAAGAAAGGCTTTAGCTTTGCCTTCGAACAGCTACTTAATTATAATGTTTCC  
AGAGCTAATTGCAATAAGATTATCATGTTATTCACGGATGGAGGAGAAGAGAGAGCCAGGAGATATTTG  
CCAAATACAATAAAGACAAAAAAGTCCGTGTGTTTACATTTTCCGTCGGTCAACATAATTATGACAGAGG  
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TTCAATGGACAAATGTGATTTGGACGCCCTGGAAGTGGGACTTGTCTACTGGAAGTCTACCAGTCTT  
CAACGTCAGTGGCAATCTGAAAATAAGACAAACTGAAGAACCAGTTGATCTTGGTGTGATGGCGCTT



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GATGTGTCTCTGGAAGATATCAAGAGATTGACACCACGTTTTACTCTGTCCCAATGGCTACTATTTTG  
 CAATTGATCCTAATGGCTATGTCTTATTGCATCCAAATCTTCAGCCAAAGGAGCCAGTCACACTGGATTT  
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 GTAGAGAACTTATGAACACCAACTTAGTATTATAATGGTGGAGAGCAAAGGGACATGTCAGTGCAGCA  
 CGCGCTGCTCATGCAAGCGGAACAGACTTCTGATGGTCCAGATCCTTGCAGATGGTCAAGCAGCCAG  
 ATACCGAAAAGGACCTGATGCTGCTTTGATAATAATGTGCTGGAGGATTATACTGACTGTGGTGTGTT  
 TCTGGGTTAAACCCTTCTTATGGTCTATCTTTGGACTCCAGTTATACTCCTTTGGCTGGTATCTGGCA  
 GCAGACTACTACTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG222819 representing NM\_001110846  
 Red=Cloning site Green=Tags(s)

MAAGLLALTLFQSLIGPSSEEPFSPVTIKSWDKMQEDLVTLAKTASGVTQLADIYEKYQDLYTV  
 EPNARQLVEIAARDIEKLLSNRSKALVRLAMEAEKVQAAHQWREDFASNEVVVYNAKDDLDPERNESEP  
 GSQRIKPVFIEDANFGRQISYQHAAVHIPTDIYEGSTIVLNELNWTLSALDEVFKRNRDEPTLLWQVFGS  
 ATGLARYYPASPWVNSRTPNKIDLYDVRRRPWYIQGAASPKDMLILVDVSGSVSGLTLKLIRTSVSEML  
 ETLSDDDFVNVASFNSAQDVSCFQHLVQANVRNKKVLDKAVNNITAKGITDYKKGFSFAFEQLLNYNVS  
 RANCNKIIMLFTDGGEEAQQEIFAKYKNDKKVRVFTFSVGQHNDRGPIQWMACENKGYYYEIPSIGAIR  
 INTQEYLDVLRPMVLADKAKQVQWNTNLYLDALELGLVITGTLPVFNVTGQSENKTNLKNQLILGVMGV  
 DVSLEDIKRLTPRFTLCPNGYFAIDPNGYVLLHPNLQPKPVTLDLDAELENEIKVEIRNKMIDGESG  
 EKTFRTLVKSQDERYIDKGNRTYTWPNVNGTDYSLALVLPYTSFYIYIKAKLEETITQARYSETLKPDNFE  
 ESGYTFIAPREYCNLKPSPDNTEFLNNEFIDRKTNNPNSCNDLNRILLDAGFTNELVQNYWSKQK  
 NIKGVKARFVVDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYESGIMV  
 SKAVELYIQGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCCKRNSDVMDCVILDDGGFLLMANH  
 DDYTNQIGRFGEIDPSMMRHLVNIISLYAFNKSYDYQSVCDPGAAPKQGAGHRSAYVPSIADILQIGWWA  
 TAAAWSILQQLLSLTFPRLLLEAVEMEEDFTASLSKQSCITEQTQYFFKNDTKFSGLDCGNCSRIFH  
 VEKLMNTNLVFMVSEKGTCPCDTRLLMQAEQTSDDGPDPCDMVKQPRYRKGPDPVCFDNNVLEDYTDCCGGV  
 SGLNPSLWSIFGLQFILLWLVSRSRHYLL

TRTRPLE - GFP Tag - V

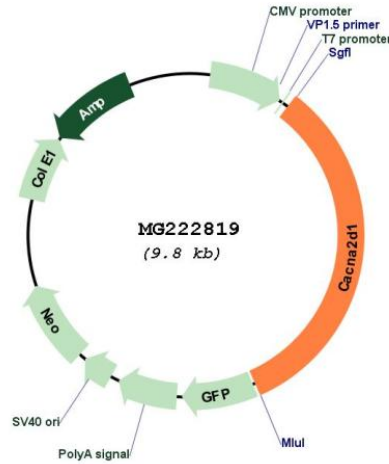
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001110846

ORF Size: 3237 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_001110846.1, NP_001104316.1</u>
<b>RefSeq Size:</b>	7400 bp
<b>RefSeq ORF:</b>	3240 bp
<b>Locus ID:</b>	12293
<b>UniProt ID:</b>	<u>O08532</u>
<b>Cytogenetics:</b>	5 6.56 cM
<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]