

Product datasheet for **MG222812**

Cacna2d1 (NM_009784) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna2d1 (NM_009784) 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:	>MG222812 representing NM_009784 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCTGGCTGCCTGCTGGCCTTGACTCTGACACTTTTCCAATCTGGGCTGATCGGCCCTCGAGCG
AGGAGCCCTTCCCTTCGCCCGTCACTATCAAGTCATGGGTGGACAAGATGCAAGAAGACCTTGTCACT
GGCAAAAACAGCAAGTGGAGTGACTCAGCTTGCTGATTTATGAAAAATACCAAGATTTGTATACTGTG
GAGCCCAACAATGCACGCCAACTGGTTGAAATTCAGCCCGAGACATTGAGAAGCTTCTAAGCAACAGAT
CTAAGGCCCTGGTGCCTGGCTATGGAAGCAGAGAAAGTCCAAGCAGCCACCAATGGAGGAAGATTT
TGCAAGCAATGAAGTTGCTACTATAATGCTAAGGATGATCTTGATCCTGAAAGAAATGAGAGTGAGCCA
GGCAGCCAACGGATTAACCTGTTTTATTGAAGATGCTAATTTTGGACGTGAGATATCCTATCAGCATG
CAGCGGTCATATTTCCACGGACATCTATGAGGGCTCAACCATAGTGTTAAACGAACTCAACTGGACAAG
TGCCCTTAGATGAAGTATTCAAAAGAAATCGAGACGAAGACCCTACACTGCTGTGGCAAGTGTGGCAGC
GCCACTGGCCTGGCCGATATTATCCAGCTTCCATGGGTGGATAATAGTAGAACTCCAAAAGATTG
ATCTATATGATGTACGCAGAAGACCATGGTACATCCAGGGAGCTGCATCCCCAAGGACATGCTCATTCT
GGTGGACGTGAGTGAAGTGTGAGCGGATTGACTCTGAACTCATCCGAACATCTGTCTCCGAGATGTTA
GAAACCCTCTGATGATGATTTCTGTAATGTAGCTTCATTTAACAGCAACGCTCAGGATGTAAGCTGTT
TCCAGCACCTGGTTCAAGCGAATGTAAGAAATAAGAAGGTGTTGAAAGATGCCGTGAATAACATTACAGC
AAAGGGGATCACAGATTACAAGAAAGGCTTTAGCTTTGCCTTCGAACAGCTACTTAATTATAATGTTTCC
AGAGCTAATTGCAATAAGATTATCATGTTATTCACGGATGGAGGAGAAGAGAGAGCCAGGAGATATTTG
CCAAATACAATAAAGACAAAAAAGTCCGTGTGTTTACATTTTCCGTCGGTCAACATAATTATGACAGAGG
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TTCAATGGACAAATGTGATTTGGACGCCCTGGAAGTGGGACTTGTCTACTGGAAGTCTACCAGTCTT
CAACGTCAGTGGCAATCTGAAAATAAGACAAACTGAAGAACCAGTTGATCTTGGTGTGATGGCGCTT



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GATGTGTCTCTGGAAGATATCAAGAGATTGACACCACGTTTTACTCTGTCCCAATGGCTACTATTTTG
 CAATTGATCCTAATGGCTATGTCTTATTGCATCCAAATCTTCAGCCAAAGAACCCCAATCTCAGGAGCC
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 GGTCAAGCAGCCAGATACCGAAAAGGACCTGATGTCTGCTTTGATAAATAATGTGCTGGAGGATTA
 GACTGTGGTGGTGTCTGGGTTAAACCTTCTTATGGTCTATCTTTGGACTCCAGTTTATACTCCTTT
 GGCTGGTATCTGGCAGCAGACTACTACTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222812 representing NM_009784

Red=Cloning site Green=Tags(s)

MAAGLLALTLFQSLIGPSSEEPFSPVTIKSWDKMQEDLVTLAKTASGVTQLADIYEKYQDLYTV
 EPNARQLVEIAARDIEKLLSNRSKALVRLAMEAEKVQAAHQWREDFASNEVVVYNAKDDLPERNESEP
 GSQRIKPVFIEDANFGRQISYQHAHVHIPTDIYEGSTIVLNELNWTLSALDEVFKRNRDEDPTLLWQVFGS
 ATGLARYYPASPWVDNSRTPNKIDLYDVRRRPWYIQGAASPKDMLILVDVSGSVSGLTLKLIKRTSVSEML
 ETLSDDDFVNVASFNSNAQDVSCFQHLVQANVRNKKVLDVANNITAKGITDYKKGFSFAFEQLLNYNVS
 RANCNKIIMLFTDGGEEAQQEIFAQYKNDKKVRVFTFSVGQHNDRGPIQWMACENKGYYYEIPSIGAIR
 INTQEYLDVLRPMVLADKAKQVQWNTNLYLDALELGLVITGTLPVFNVTGQSENKTNLKNQLILGVMGV
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 PDNFEEESGYTFIAPREYCNLKPSPDNNEFLNLFNEFIDRKTNNPNSCNTDLINRILLDAGFTNELVQNY
 WSKQKNIKGVKARFVVTGGITRYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNKSGPGAYE
 SGIMVSKAVELYIQGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCDCRNSDVMDCVILDDGGFL
 LMANHDDYTNQIGRFFGEIDPSMMRHLVNIISLYAFNKSVDYQSVCDPGAAPKQAGHRSAVYPSIADILQ
 IGWWATAAAWSILQQLLSLTFPRLLLEAVEMEEDDFTASLSKQSCITEQTQYFFKNDTKSFGLLDCGNC
 SRIFHVEKLMNTNLVFMVSEKGTCPCDTRLLMQAEQTSDDGPDPCDMVKQPRYRKGPVDFDNNVLEDYT
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TRTRPLE - GFP Tag - V

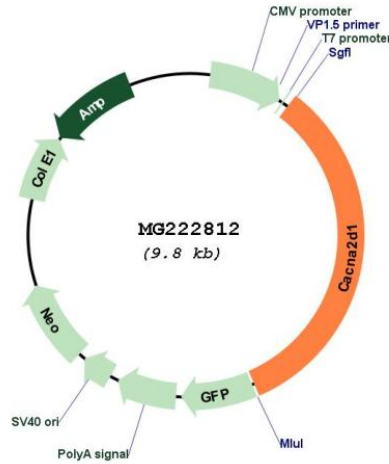
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009784

ORF Size: 3252 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.

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:	<ol style="list-style-type: none">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:	<u>NM_009784.2</u> , <u>NP_033914.1</u>
RefSeq Size:	7415 bp
RefSeq ORF:	3255 bp
Locus ID:	12293
UniProt ID:	<u>O08532</u>
Cytogenetics:	5 6.56 cM
Gene Summary:	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]