

Product datasheet for **RR200420**

Cacna2d1 (NM_012919) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna2d1 (NM_012919) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cacna2d1
Synonyms:	Cacna2; CCHLA2; DHSCCA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR200420 representing NM_012919 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCTGGCTGCCTGCTGGCCTTGACTCTGACACTTTTCCAATCTTGGCTGATCGGCCCTCGAGCG
AGGAGCCCTTCCCTTCGCCGCTCACTATCAAGTCATGGGTGGATAAAATGCAGGAAGACCTTGTCACACT
GGCAAAGACAGCAAGTGGAGTGACTCAGCTTGCTGACATTTATGAAAAATACCAAGATTTGTATACTGTG
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CTAAAGCCCTGGTGCCTGGCTATGGAAGCAGAGAAAGTCCAAGCCGCCACCAATGGAGGGAAGATTT
TGCAAGCAACGAAGTTGTCTACTACAACGCTAAAGACGATCTTGATCCTGAAAGAAATGAGAGTGAGTCA
GGCAGCCAACGGATTAACCTGTTTTTATCGAAGACGCTAATTTTGGACGCCAGATATCCTATCAACATG
CAGCGGTCCATATCCACGGACATCTATGAGGGCTCAACCATAGTGTTAAACGAACCTCACTGGACAAG
TGCCTTAGATGAAGTTTTCAAAGAAATCGAGATGAAGACCCTACATTGCTGTGGCAAGTGTGGCAGC
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ATCTCTACGATGTACGCAGAAGACCATGGTACATCCAGGGAGCTGCATCCCCAAAGACATGCTCATTCT
GGTGGACGTGAGTGAAGTGTGAGCGGATTGACTCTGAAACTCATCCGGACATCTGTCTCTGAGATGTTA
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GATGTGCTCTGGAAGATATTAAGAGATTGACACCACGTTTTACTGTGCCCAACGGTTACTATTTTG



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CAATCGATCCTAATGGTTATGTCTTACTGCATCCAAATCTTCAGCCAAAGAACCCCAAATCTCAGGAGCC
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Protein Sequence:

>RR200420 representing NM_012919

Red=Cloning site Green=Tags(s)

MAAGLLALTLFQSWLIGPSSEEPFSPVTIKSWDKMQEDLVTLAKTASGVTQLADIYEKYQDLYTV
 EPNARQLVEIAARDIEKLLSNRSKALVRLAMEAEKVQAAHQWREDFASNEVVVYNAKDDLDPERNESES
 GSQRIKPVFIEDANFGRQISYQHAAVHIPTDIYEGSTIVLNELNWTLSALDEVFKRNRDEDPTLLWQVFGS
 ATGLARYYPASPWDNSRTPNKIDLYDVRRRPWYIQGAASPKDMLILVDVSGSVSGLTLKLIRTSVSEML
 ETLSDDDFVNVASFNSAQDVSCFQHLVQANVRNKKVLDVANNITAKGITDYKKGFSFAFEQLLNYNVS
 RANCNKIIMLFTDGGEEAQQEIFAKYKDKKVRVFTFSVGQHNDRGPIQWMACENKGYYYEIPSIGAIR
 INTQEYLDVLRPMVLGDKAKQVQWNTNLYLDALELGLVITGTLPVFNVTGQSENKTNLKNQLILGVMGV
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 NELVQNYWSKQKNIKGVKARFVVDGGITRVYPKEAGENWQENPETYEDSFYKRSLDNDNYVFTAPYFNK
 SGPGAYESGIMVSKAVELYIQGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCDCRNSDVMDCVI
 LDDGGFLLMANHDDYTNIQRGFGEIDPSMMRHLVNIISLYAFNKSVDYQSVCDPGAAPKQAGHRSAYVP
 SITDILQIGWWATAAAWSILQQLLSLTFPRLLEAVEMEEDFTASLSKQSCITEQTQYFFKNDTKSFSG
 LLDGCGNSRIFHVEKLMNTNLVFMVESKGTCPCDTRLMLQAEQTSDDGPDPCDMVKQPRYRKGPDVCFDN
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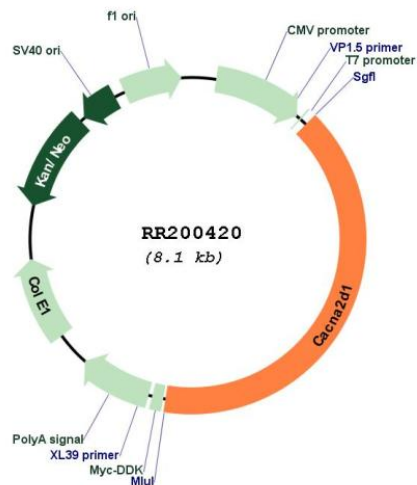
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_012919

ORF Size: 3273 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_012919.3, NP_037051.2</u>
RefSeq Size:	3964 bp
RefSeq ORF:	3276 bp
Locus ID:	25399
Cytogenetics:	4q12
MW:	123.5 kDa
Gene Summary:	subunit of voltage-gated calcium channels; contributes to the regulation of N- and/or L-type calcium channels [RGD, Feb 2006]