

Product datasheet for RR200421

Cacna2d1 (NM_001110848) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cacna2d1 (NM_001110848) 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:	>RR200421 representing NM_001110848 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCTGGCTGCCTGCTGGCCTTGACTCTGACACTTTTCCAATCTTGGCTGATCGGCCCTCGAGCG
AGGAGCCCTTCCCTTCGCCGCTCACTATCAAGTCATGGGTGGATAAAATGCAGGAAGACCTTGTCACACT
GGCAAAGACAGCAAGTGGAGTGACTCAGCTTGCTGACATTTATGAAAAATACCAAGATTTGTATACTGTG
GAGCCAAATAATGCACGCCAACTGGTTGAAATTGCAGCTAGAGACATTGAGAACTTCTGAGCAACAGAT
CTAAAGCCCTGGTGCCTGGCTATGGAAGCAGAGAAAGTCCAAGCCGCCACCAATGGAGGGAAGATTT
TGCAAGCAACGAAGTTGTCTACTACAACGCTAAAGACGATCTTGATCCTGAAAGAAATGAGAGTGAGTCA
GGCAGCCAACGGATTAACCTGTTTTTCATCGAAGACGCTAATTTTGGACGCCAGATATCCTATCAACATG
CAGCGGTCCATATCCCACGGACATCTATGAGGGCTCAACCATAGTGTTAAACGAACCTCACTGGACAAG
TGCCTTAGATGAAGTTTTCAAAGAAATCGAGATGAAGACCCTACATTGCTGTGGCAAGTGTGGCAGC
GCCACCGCCTGGCCGATATTATCCAGCTTCTCCGTGGTGGATAACAGCAGAACCTCAAACAAGATCG
ATCTCTACGATGTACGCAGAAGACCATGGTACATCCAGGGAGCTGCATCCCCAAAGACATGCTCATTCT
GGTGGACGTGAGTGAAGTGTGAGCGGATTGACTCTGAAACTCATCCGGACATCTGTCTCTGAGATGTTA
GAAACCCTTCCGATGATGATTTCTGTAATGTAGCTTCATTTAACAGCAATGCTCAGGATGTGAGTTGTT
TCCAGCACCTGGTTCAAGCGAATGTAAGGAACAAGAAGGTGCTGAAGGATGCGGTGAATAACATCACAGC
AAAGGGGATAACAGATTACAAGAAAGGCTTTAGCTTCGCGTTTGAACAGCTACTTAATTATAATGTTTCC
AGAGCCAATTGTAATAAGATCATCATGTTATTACGGATGGAGGAGAAGAGAGAGCCAGGAGATATTTG
CCAAGTACAATAAAGACAAAAAGTCCGCGTGTACATTTTCTGTTGGTCAACATAATTATGACAGAGG
ACCTATTCAGTGGATGGCTTGTGAAAACAAAGGTTATTATTATGAGATCCCTCTATTGGTGAATAAGA
ATCAATACTCAGGAATATCTAGATGTTCTGGGAAGACCAATGGTTTTAGCCGGGGACAAAGCAAAGCAAG
TCCAGTGGACAAATGTGTATTTGGATGCTGGAGCTGGGACTTGTCACTACTGGAACCTCTACCGTCTT
CAACGTCCTGGCCAGTCTGAAAATAAGACTAACTTGAAGAACCAGTTGATTCTTGGTGTGATGGCGGT
GATGTGCTCTGGAAGATATTAAGAGATTGACACCACGTTTTACTGTGCCCAACGGTTACTATTTTG



[View online »](#)

CAATCGATCCTAATGGTTATGTCTTACTGCATCCAAATCTTCAGCCAAAGAACCCCAAATCTCAGGAGCC
 GGTCACTGGATTTCTCGATGCTGAGTTAGAGAATGATATTAAGTGGAGATTCGAAATAAATGATA
 GACGGAGAAAGTGGAGAAAAACATTCAGAACTCTGGTCAATCTCAAGATGAGAGATTTATTGACAAAG
 GAAATCGAACATACACATGGACACCTGTCAATGGCACAGATTACAGTTTGGCCTTGGTATTGCCAACCTA
 CAGTTTTACTATATAAAGCCAAAATAGAAGAGACAATACTCAGGCCAGATATTCAGAAACCCCTGAAG
 CCAGACAATTTGAAGAATCTGGCTACACTTTCATAGCACCAAGGGAATACTGCAATGACCTGAAACCTT
 CAGATAATAACACTGAATTTCTTTAAATTTCAATGAATTTATTGATAGGAAAACCTCAAACAACCCCTTC
 CTGTAATACAGATTTGATTAATAGAATCTTGTGGATGCGGGTTTTACAATGAACCTTGCCAAAATTTAT
 TGGAGTAAACAGAAAAATATCAAAGGAGTGAAGGCACGCTTTGTGGTACTGATGGCGGAATTACAAGAG
 TTTACCCCAAAGAGGCTGGAGAAAACCTGGCAAGAGAACCAGAGACGTATGAGGACAGCTTCTACAAACG
 GAGCCTAGATAACGATAACTACGTTTTCACTGCGCCCTACTTCAACAAAAGTGGACCTGGTGCCTATGAA
 TCTGGAATTATGGTAAGCAAAGCTGTAGAAGTGTACATCCAAGGAAAACCTCTTAAGCCTGCAGTTGTGG
 GAATTAATTTGACGTAACCTCTGGATAGAAAATTTACAAAACCTCAATCAGGGATCCGTGTGTCTGG
 TCCAGTTTGTGACTGAAAAGAAACAGTGTGTAATGGACTGTGTCATTCTAGATGATGGTGGATTTCTT
 CTGATGGCCAATCATGATGATTACACTAATCAGATTGGACGTTTTTTGGAGAGATTGACCCGAGCATGA
 TGAGACACCTGGTTAATATATCACTTTATGCATTAATAAATCATATGACTATCAGTCTGTGTGTATCC
 AGGGGCAGCACCAAAGCAAGGAGCAGGACATCGCTCAGCCTATGTGCCATCAATTACAGACATACTCCAG
 ATTTGGCTGGTGGGCCACTGCTGCCGCTGGTCAATTTCTCCAGCAGCTACTCTTGAGTTTGACATTTCCAC
 GGCTCCTTGAGGCAGTTGAAATGGAAGAGGATGACTTCACAGCTTCCCTGTCTAAGCAGAGCTGCATCAC
 AGAACAACTCAGTACTTCTCAAGAAGCATACTAAATCATTCAAGTGGTTACTGGACTGTGAAAACCTGT
 TCCAGGATCTTTCATGTTGAGAAGCTTATGAACACCAACCTAGTGTTCATAATGGTGGAGAGCAAGGAA
 CATGTCCGTGTGACACGCGGCTGCTCATGCAAGCAGAACAGACTTCTGATGGTCCAGATCCTTGCAGAT
 GGTTAAGCAGCCAGATACCGAAAAGGACCTGATGTCTGCTTTGATAACAATGTGCTGGAGGATTATACC
 GACTGTGGTGGTCTTCTGGATTAACCCCTTCTTATGGTCTATCTTTGGACTCCAATTTATACTCCTTT
 GGCTGGTATCTGGCAGCAGACACTATCTATGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR200421 representing NM_001110848
 Red=Cloning site Green=Tags(s)

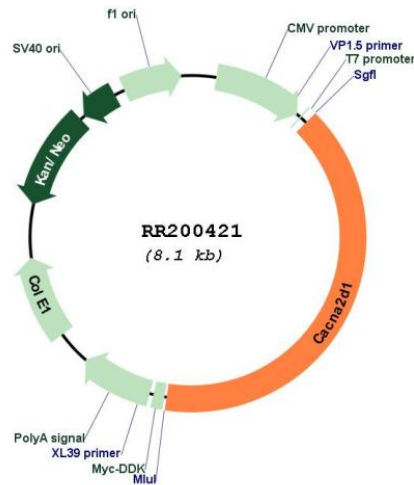
MAAGLLALTLFQSWLIGPSSEEPFSPVTIKSWDKMQEDLVTLAKTASGVTQLADIYEKYQDLYTV
 EPNARQLVEIAARDIEKLLSNRSKALVRLAMEAEKVQAAHQWREDFASNEVVVYNAKDDLDPERNESES
 GSQRIKPVFIEDANFGRQISYQHAHVHIPTDIYEGSTIVLNELNWTLSALDEVFKRNRDEDPTLLWQVFGS
 ATGLARYYPASPWVNSRTPNKIDLYDVRRRPWYIQGAASPKDMLILVDVSGSVSGLTLKLIKRTSVSEML
 ETLSDDDFVNVASFNSAQDVSCFQHLVQANVRNKKVLDVANNITAKGITDYKKGFSFAFEQLLNYNVS
 RANCNKIIMLFTDGGEEAQQEIFAQYKNDKKVRVFTFSVQGHNYDRGPIQWMACENKGYYYEIPSIGAIR
 INTQEYLDVLRPMVLADKAKQVQWNTNLYLDALELGLVITGTLPVFNVTGQSENKTNLKNQLILGVMGV
 DVSLIEDIKRLTPRFTLCPNGYFAIDPNGYVLLHPNLQPKNPKSQEPVTLDFLDAELENKVEIRNKMI
 DGESGEKFTRLVKSQDERFIDKGNRTYTWPNVNGTDYSLALVLPYTSFYIYKAKIEETITQARYSETLK
 PDNFEEESGYTFIAPREYCNLKPSPDNNEFLNLFNEFIDRKTNNPNSCNTDLINRILLDAGFTNELVQNY
 WSKQKNIKGVKARFVVTGGITRYPKEAGENWQENPETYEDSFYKRSNDNDNYVFTAPYFNKSGPGAYE
 SGIMVSKAVELYIQGKLLKPAVVGKIDVNSWIENFTKTSIRDPCAGPVCCKRNSDVMDCVILDDGGFL
 LMANHDDYTNQIGRFGEIDPSMMRHLVNIISLYAFNKSVDYQSVCDPGAAPKQAGHRSAVYPSITDILQ
 IGWWATAAAWSILQQLLSLTFPRLLLEAVEMEEDDFTASLSKQSCITEQTQYFFKNDTKSFGLLDCGNC
 SRIFHVEKLMNTNLVFMVSEKGTCPCDTRLLMQAEQTSDDGPDPCDMVKQPRYRKGPVDFDNNVLEDYT
 DCGGVSGLNPSLWSIFGLQFILLWLVSGSRHYLW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Plasmid Map:


ACCN: NM_001110848

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_001110848.1, NP_001104318.1</u>
RefSeq Size:	3264 bp
RefSeq ORF:	3255 bp
Locus ID:	25399
Cytogenetics:	4q12
MW:	122.7 kDa
Gene Summary:	subunit of voltage-gated calcium channels; contributes to the regulation of N- and/or L-type calcium channels [RGD, Feb 2006]