

Product datasheet for **RR217505**

Cacna2d4 (NM_001191751) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cacna2d4 (NM_001191751) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cacna2d4
Synonyms: RGD1562038
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR217505 representing NM_001191751
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCAGGGACCTGGGTGGCAGCAAGTTCGTTACAGCAGGAGCACTGTCTCCTCCCCTGTCCCTCCC
CCAGTGGGAACACCATGGCAAGAAGCCCCACATTTGCTCCTCAGCCACAGCTGGGGCCACCGTGGACAGCA
GACAGCTGCATGGACCTTCTGCGGAAAATGCCAATTGCTCTGTGGCTGTGCTCTTGGACACCTCCCTG
CCGACTGCAAGGAGCCAGGCTACAATTCCTCTGGAACAGTGAAGCTCTGGGCTGAAACCTTCGGCAGGG
ATCTGTACAGCACGGTGACCAGATACTCGGGTTCTCTCCTGCTGCAGAAGAAGTACAAGGATGCAGAACC
CAGTCTGAAGATCAAAGAGGTGGATGGCTTGGAGCTGGTGAAGAAGTTCTCAGAGGACATGGAGACCATG
CTTCGGAGGAAAGTTGAGGCTGTGGAGAGCCTGGTGGAGGCCGCTGAGGAGGCTGACCTGAACCATGAGT
TCAATGCGTCTCTGGTGTAACTACTACAACCTCAGTACTGATCAATGAGAAGGATGACAAGGGCAACTA
TGTGGAGCTGGGAGCTGAGTTTCTCTCGAGTCCGACGCCACTTCAACAACCTGAGGGTGAATGTCTCC
ATGAGCAGCGTGCAGCTACCCACCAATGTGTACAACAAGACCCAGACATTTTAAATGGCGTCTATATGT
CCGAAGCCCTGAACCTGTGTTTGTGGAGAATTTTCAGAGAGACCCACATTGACCTGGCAGTATTTTGG
CAGTTCAACTGGGTTCTTCAGGATCTATCCAGGATAAAGTGGACACCTGATGAAAATGGAGTCAATCGCC
TTCGACTGCAGAAACCGTGGCTGGTACATACAAGCCGCCACTTCTCCCAAGGACATCGTATCCTGGTGG
ACATGAGCGGCAGCATGAAGGGGCTGAGGATGGCCATTGCCAAACACACCGTCAACACCATATTGGACAC
CCTGGGGGAGAACGACTTCGTGAACATCATCGCGTACAATGACTATGTCCACTACATCGAGCCCTGCTTC
AAAGGCATCCTCGTCCAAGCGGATCGAGACAACCGAGAGCATTTCAGCAGTTGGTGGATGAGCTGATGG
TCAAAGGCGTGGGTATCGTGAGTCAAGCTAATTGAAGCTTTCAGATCCTGAAGCAGTTCCAAGAGTC
CAGACAAGGAAGCCTCTGCAACCAGGCTATCATGCTTGTACCGACGGGGCTGTGGAAGACTATGAGCCC
GTGTTTGGAGCTATAACTGGCCAGACCGTAAGTCCGAGTTTTACCTACCTTATTGGAAGAGAAGTGA
CTTTCGCTGACCGCATGAAATGGATCGCCTGCAACAATAAAGGTTACTACACACAGATCTCCACGCTGGC
TGATGCGCAGGAGAACGTGATGGAGTACCTGCACGTGCTCAGCCGTCCTATGGTCAATCAACCACGACCAC
GACATCATCTGGACAGAGGCTTATATGGACAGCCGGCTCCTTACCTCAGAGGCACAAAGCCTGATGCTCC



TCACCACAGTGGCCATGCCAGTCTTCAGCAAAAAGAACGAAACACGATCCCATGGCATTCTCCTGGGTGT
GGTGGGCTCTGACGTGACCCTAAGAGAGCTCATGAAGCTGGCACCCGATATAAGCTCGGGGTACATGGC
TATGCCTTTTGAACACTAACAATGGCTACATCCTCTCTCATCCTGACCTCCGACCTTTGTACAGAGAAG
GCAAGAAGTTGAAACCCAAGCCAACTACAACAGTGTGGACCTCTCAGAAGTGGAGTGGGAGGACCAAGC
TGAAATCCTGAGGACCGCCATGATCAATGGGAAAACAGGTCTCACTCCATGGACGTGAAGTGCCACTG
GATAAAGGGAAACGAGTTCTATTCTGACCAATGACTATTTCTTCACGGACATCAGTGACACGCCTTTCA
GCTTGGGAGTGGTGCTCACCAGGGGCCATGGAGAATACATCCTCCTGGGGAACACGTCTGTGGAGGAAG
CCTACATGACTTGTCTCATCCGGATCTGACCCTGGCCAGTGACTGGATCTATTGTATCACGGATATCGAC
CCGGACCACCGGAAGCTCAGCCAACTGGAAGCTGTGGTCCGTTTTCTGACAGGGTGGATCCAGACCTGG
AGTGTGATGATGAGGAGCTGGTGCAGGAGTGTGTTTGACGCAGTGGTGACCGACCCATGGAAGCCTA
CTGGACAGCACTGGCGCTCAACATCTCCGAAGAGTCAGAGCCTGGTGTGGAAGTGGCCTTTCTGGGGACC
CGGGCTGGCCTTCTAAGAAGAAGCTTGTCGTAGGCTCCGAGAAGGTCTCTGATAGGAAGTTCCTGACAC
CTGAAGATGAAGCCAGTATTTTTACCATGGACCACTTCCCACTGTGGTATCGGCAGGCCCTGAGCAGCC
CCCAGGCAGCTTTGTCTTCAATCTCCGTGGGCAGAGGGACCAGATAGCCCCGGCAAACCACTGGCGGTA
AGGGCCAGCACGGCAATAACTGTGACAGTGGACGGGAAGACGGCCATTGCAGCAGCCGTGGGCATCCAGA
TGCAAGCGGACTACCTCCAGCGCAATTTCTGGGACCCATGCAGCAGTGCAACACTGTAGAGGGGCCCTG
CCCGAAGCGCTGCCAGGACACTGATCTGGACTGCTTCGTATAGACAACAATGGCTTCATCCTGATCTCA
GAGAGACCCCAAGAGATTGGAAGACTTCTGGGGAAAGCGGATGGTGTCTCATGACGCAGCTTCTCAGCA
TGGGGGTGTTAGCCGTGTGACCATGTATGACTACCAAGCCATGTGCAAGCCCCCGGATCACCACCACAG
TGCAGCCGAATCCCTGATCAGTCTCTCTGCTTCTGACGGTGGCCAAGTGGCTACTACATGAATGT
CTGCTATTCCTGTTTCAGTGGAGTGCTTGGGGATCTTGGCAGGACAAAGGGTCAGAGGCCAAAGCTGTCT
TCCATCACTCCCAAGCACAAGAAGCAAGACCTCCTGCACCCCTGTGACACAGAGTACCCAGTGTTCGT
GCACCAGACGGCCATCCGGGAGGCCAACGGGATCATCGAGTGTGGGGGCTGCCAGAAGACATTCGTGATG
CAACAGATTCAGCAGCAACCTGCTCCTGCTAGTGACAGACCGTACCTGTGACTGCAGCGCCTACTCTC
CCATCCTCCAGGAGGCCACAGAAGTCAAAATAACGCCTCCGTCAAGTGCAACAGGATGCCTCCAGAA
GCCCGGAGACGACCAGGCTCCTGCCATGCCTTCCATCCCGAGGAAAATGCCAGGACTGTGGCGGTGCT
TCAGACACTCTGCCTTATCCCCCTGCTCCTGCTGGCACTGTGGGCTGGCGTCTTCCGCCCCAGCTTC
TGTGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR217505 representing NM_001191751
 Red=Cloning site Green=Tags(s)

```
MPRDLGGSKFVHSRSTVLLPCPSPSGNTMARSPTLSSSHSWGHRGQQTAAWTFLRKMPIVLWLLLLDTSL
PTARSQATIPLETVKLWAETFGRDLYSTVTRYSGSLLLQKKYKDAEPSLKIKEVDGLELVKKFSEDMETM
LRRKVEAVESLVEAAEADLNHEFNASLVFNYYNSVLIN EKDDKGNVELGAEFLLSDAHFNLRVNVS
MSSVQLPTNVYKDPDILNGVYMSEALNPVFVENFQRDPTLTWQYFGSSTGFFRIYPGIKWTPDENGVI
FDCRNRGWYIQAATSPKDIVILVDMMSGMKGLRMAIAKHTVTTILDTLGENDFVNI IAYNDYVHYIEPCF
KGILVQARDNRHEFKQLVDELMVKGVGIVSQALIEAFQILKQFQESRQGS LCNQAIMLVTDGAVEDYEP
VFETYNWPDRKVRVFTYLIGREVTFADRMKWIACNNKGYTQISTLADAQENVMEYLHVL SRPMVINHDH
DIIWTEAYMDSRLLTSEAQSLMLTTVAMPVFSKKNETRSHGILLGVVGSVDVTLRELMKLAPRYKLVGHG
YAF LNTNNGYILSHPDLRPLYREGKCLKPKPNYSVDLSEVEWEDQAEILRTAMINGETGSHSMDVKVPL
DKGKRVLFLTNDYFFTDISDTPFSLGVVLRGHGEYILLGNTSVEEGLHDL LHPDLTLASDWIYCIDID
PDHRKLSQLEAVVRFLTGVDPLECDDEELVRELVDAVV TAPMEAYWTALALNISESEPGVEVAFLGT
RAGLLRRSLFVGSEKVS DRKFLTPEDEASIF TMDHFPLWYRQASEQPPGSFVFNLRWAEGPDS PGKPVAV
RASTAITVTVDGTAIAA AVGIQMADYLQRQFWAAMQCCNTVEGPCPKRCQD TDLDCFVIDNNGF ILIS
ERPQEI GRLLGEADGALMTQLLSMGVFSRV TMYDYQAMCKPPDHHSAAESLISPLSAFLTVAKWLLHEC
LLFLFEWSAWGSWQDKGSEAKAVFHSHKHKKQD L LHPCDTEYPVFVHQT AIREANGIIECGGCQKTFVM
QQIPSSNLLLLVTDR TCDCSAYSPI LQEATEVKYNASVKCNRMRSQKPRRRPGSCHAFHPEENAQDCGGA
SDTL PSSL LLLALWAWRLPPQLLW
```

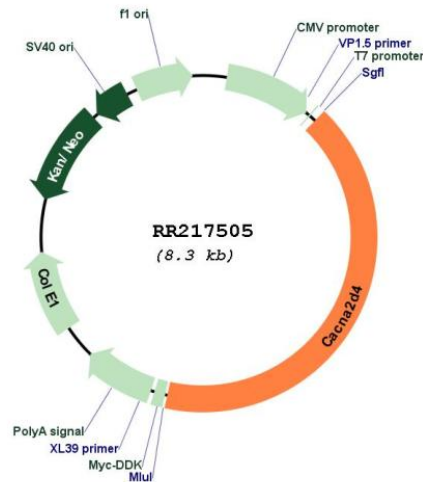
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001191751

ORF Size: 3435 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:

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: [NM_001191751.1](#), [NP_001178680.1](#)

RefSeq Size: 3465 bp

RefSeq ORF: 3438 bp

Locus ID: 312668

Cytogenetics: 4q42

MW: 129.1 kDa