

Product datasheet for **RR208516**

Cnm2 (NM_001011942) Rat Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Cnm2 (NM_001011942) Rat Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Cnm2 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |



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ORF Nucleotide Sequence:

>RR208516 representing NM_001011942
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGATTGGCTGTGGAGCTTGTGAACCCGAAGTAAAGATGGCGGGCGGGCAGGCAGCCGCCCACTGCCCA
 CTTGGAAGATGGCGGCGGCCGAGCCTCAGTGCCCGCGGCCGGGGGTCTGCAGGCAGCTGCGGGCCG
 GCTGCTGCCGCTGCTACTGCTGAGCTGCTGCTGCAGCGCGGGCGGCTGCACAGCGCCGCGGAGAACGAG
 GAGACTGTGATCATCGGACTGCGGCTGGAGGATACGAACGACGTGTGTTTCATGGAAGGGGGTCTCTGC
 GGGTGAGCGAGCGGACCCGGGTCAAGCTGCGGGTGTACGGGCAGAACATCAACAACGAGACATGGTCCCG
 CATCGCCTTCACTGAGCACGAGCGCGCCGGCACACACCCGGCGAGCGTGGGCTGGGGGGCCCCGCGCT
 CCGGAGCCGACAGTGGCCCCAGCGCTGCGGCATCCGCACCTCAGACATCATCATCTTGCCCCACATCA
 TTCTCAATCGCCGACATCGGGCATATTGAGATCGAGATCAAACCGCTGCGCAAGATGGAGAAGAGCAA
 GTCTTATTACCTGTGACGTCTCTCTCCACGCCGCATTGGGCGCCGGCGGCTCCGGGTCTGCGAGTGGC
 ACCGTCGGGGGCAAGGGTGGCGCGGGGGTGGCTGGACTCCCGCTCCTCCCTGGGCCGAGACCACCTGGA
 TTTACCACGACGGTGAGGACACCAAGATGATAGTGGGCGAGGAGAAGAAGTTCTTGTGCCCTTCTGGCT
 GCAAGTGATCTTCATCTCGCTGCTGTGCTGTCCGGCATGTTGAGCGGCTCAACCTGGGGCTCATG
 GCTCTGGACCCGATGGAGCTGCGCATCGTGCAAACTGCGGCACGGAGAAAGAGAAGAATTATGCCAAGC
 GCATCGAGCCGGTGGCAGGCAGGGCAACTACCTGCTGTGCTCGTGTGCTGGGAAACGTAAGTCA
 CACCACGCTCACCATCCTGCTCGACGACATTGCGGGCTCAGGCCCTGTGGCGGTGGTGTCTCCACCATT
 GGCATCGTCATCTTCGGAGAAATCGTGCCCAAGCCATTGCTCCCGACACGGCTGGCGGTAGGGGCCA
 ATACCTCTTCTCACCAGTTTTCATGATGATGACCTTCCCCGTTCTTACCCGGTATGCAAACTG
 GGACTGCGTCTGGGCCAGGAGATAGGCACTGTCTATAACCGGGAAAACTGCTAGAGATGCTCCGGGTT
 ACTGACCCTACACGACCTCGTTAAGGAGGAGCTGAACATCATCCAAGGGCGCTGGAGCTCCGACCA
 AGACGGTGGAGGACGTGATGACTCCCTCAGGGACTGCTTCATGATCACCGGCGAGGCTATCCTGGACTT
 CAACACCATGTCTGAGATCATGGAGAGTGGCTACACTCGAATCCCAGTGTTCGAGGGAGAACGGTCAAC
 ATCGTGGATCTGCTTTTGTCAAAGACTTGGCCTTCGTGGATCCAGATGACTGTACTCCCTTAAAAACCA
 TCACCAAAATTTACAACCACCTTTGCACTTTGTTTTCAATGACACCAAGTTGGACGCTATGCTGGAAGA
 ATTTAAGAAAGGTAAATCCCACCTGGCCATTGTGCAGCGAGTGAACAATGAGGGCGAAGGGGACCCGTTT
 TATGAAGTCTGGGAATTGTACCTTGAAGATGTGATTGAAGAATCATCAAATCTGAAATCTTGATG
 AGACAGACTTGTACCCGACAACAGAACAAGAAAGTGGCCACCGTAAAGAAAGCAAGATTTCTC
 TGCCTTAAGCAGACGGACAGCGAGACGAAGTTAAAATATCACCGCAGCTTCTCCTGGCCATGCACCGT
 TTCTTAGCAACAGAAGTAGAAGCATTAGCCCATCCCAGATGTCAGAGAAGATCCTCCTAAGGCTGCTAA
 AGCACCCCAATGTCATCCAGGAAGTGAAGTACGACGAGAAGAACAAGAAAGCCCCGAAATGCTACCTCTA
 CCAGCGGAACAAGCCGTAGACTACTTCGTCTCATTCTGCAGGGAAAGGTGGAGGTAGAAGCTGGGAAA
 GAAGGCATGAAGTTTGAAGCCAGTGCCTTTTACTACTACGGTGTGATGGCCCTCACAGCCTCTCCAGTTC
 CTTTGTCCCTGTCTCGCACCTTTGTTGTGACAGGACAGAGGTGTAGCTGCGGGCTCTCCAGGTGAAAA
 TAAGTCACTCCTCGCCCTGCGGCTGAATCACTCGACTCTCTCAGTCGGAGCGACCGGATTGATGCC
 ATGACACCCACCTTGGGAGCAGCAACAACAGCTCAGCTCTTATTCTACAAGTCTACATCCCGGATT
 ACTCAGTGCAGCCCTCTCCGACCTACAGTTCGTCAAGATCTCCAGACAGCAATACCAAAATGCCTTGAT
 GGCGTCCCGGATGGACAAAACGCCTCAGTCTTCAGACAGTAAAAACTAAAATTGAATTGACTCTTACG
 GAGATGCATGACGGCTTGCCAGACGAGACGGCCAACTTGCTCAATGAACAGAAGTGTGTGCACACAATA
 AGGCCAACACAGCCTGCACAGTGAAGGCGCCATC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR208516 representing NM_001011942
Red=Cloning site Green=Tags(s)

MIGCGACEPEVKMAGGQAAAAALPTWKMAARRSLSARGRGLVQAAAGRLLPLLLLSCCCSAGGCTAAGENE
ETVIIGLRLEDNDVSMEGGALRVSERTRVKLRVYQINNETWSRIAFTEHERRRHTPGERLGGPAP
PEPDSGPQRCGIRTSDIILPHIILNRRTSGIIEIEIKPLRKMESKSYLCTSLSTPALGAGGSGSASG
TVGGKGGAGVAGLPPPWAETTIIYHDGEDTKMIVGEEKKFLLPFWLQVIFISLLLCLSGMFSGLNLGLM
ALDPMELRIVQNCGTEKEKNYAKRIEPVRRQGNVLLCSLLLGNVLYNTTLTILLDDIAGSGLVAVVSTI
GIVIFGEIVPQAICSRHGLAVGANTIFLTKFFMMTFPASYPVSKLLDCVLGQEI GTVYVYREKLEMLRV
TDPYNDLVKEELNIIQGALELRKTVEDVMTPLRDCFMITGEAILDFNTMSEIMESGYTRIPVFEGERSN
IVDLLFVKDLAFVDPDDCTPLKTIKTFYNHPLHFVFNNTKLDAMLEEFKKGKSHLAIVQRVNNEGEGDPF
YEVLGIVTLEDVIEEIIKSEILDETDLYDNRTKKKVAHRERKQDFSAFKQTDSETKVKISPQLLAMHR
FLATEVEAFSPSQMSEKILLRLLKHPNVIQELKYDEKNKKAPECYLYQRNKPVDYFVLIQGKVEVEAGK
EGMKFEASAFSYGVMALTASPVPLSLSRTFVVSRTVEVLAAGSPGENKSPPRPCGLNHSDLSRSDRIDA
MTPTLGSSNNQLSSSFLQVYIPDYSVRALSDLQFVKISRQYQNALMASRMDKTPQSSDSENTKIELTLT
EMHDGLPDETANLLNEQNCVSHNKANHSLHSEGA I

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

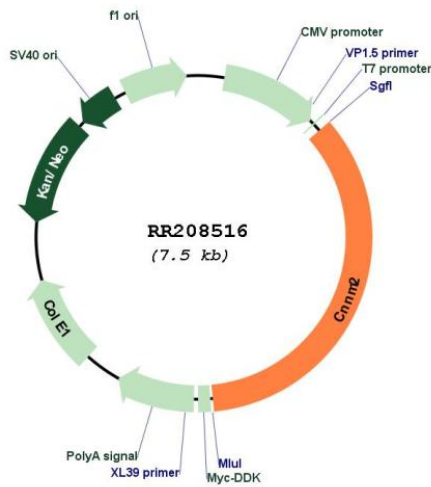
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



| | |
|-------------------------------|---|
| ACCN: | NM_001011942 |
| ORF Size: | 2625 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: | NM_001011942.1 , NP_001011942.1 |
| RefSeq Size: | 3300 bp |
| RefSeq ORF: | 2628 bp |
| Locus ID: | 294014 |
| UniProt ID: | Q5U2P1 |
| Cytogenetics: | 1q54 |
| MW: | 96.6 kDa |
| Gene Summary: | Divalent metal cation transporter. Mediates transport of divalent metal cations in an order of Mg(2+) > Co(2+) > Mn(2+) > Sr(2+) > Ba(2+) > Cu(2+) > Fe(2+).[UniProtKB/Swiss-Prot Function] |