

Product datasheet for **RR208831**

Mark2 (NM_021699) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mark2 (NM_021699) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mark2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RR208831 representing NM_021699
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCAGCGCTCGGACCCCTACCCAGCTGAACGAAAGGACACGGAGCAGCCACCTTGGGACACC
 TTGATTCCAAGCCAGCAGTAAGTCCAACATGCTGCGGGCCGCAACTCAGCCACCTCTGCTGACGAGCA
 GCCCATATTGGCAACTACAGACTCCTTAAGACCATTGGCAAGGTAACCTTGGCAAAGTGAAGTTGGCC
 CGGCACATCTGACGGGAAAGAGGTAGCTGTGAAGATCATTGACAAGACTCAGCTGAATTCCTCCAGCC
 TGCAGAACTCTCCGAGAAGTAAGAATAATGAAGTTTTGAATCATCCCAACATAGTTAAGTTATTTGA
 AGTGATCGAGACTGAGAAGACGCTCTACCTTGTTCATGGAGTATGCCAGTGGCGGAGAGGTATTTGATTAC
 CTAGTGGCCCATGGCAGGATGAAAGAAAAGAAGCTCGAGCCAAATTCGCCAGATAGTGTCTGCTGTGC
 AGTACTGTACCAGAAGTTTATTGTTTCATAGAGATCTAAAGGCAGAAAACCTGCTCCTGGATGCTGATAT
 GAACATCAAGATTGCAGACTTTGGCTTTAGTAACGAATTCACCTTTGGGAACAAGCTGGATACTTTCTGT
 GGTAGTCTCCTTATGCTGCCCAAGAACTCTCCAGGGCAAAAAGTATGACGGTCCCTGAAGTGGATGCT
 GGAGCCTGGGCGTCATCCTCTATACACTGGTCAGCGGGTCCCTGCCTTTTGATGGACAGAACCTCAAGGA
 GCTACGGGAAAGGGTACTGAGGGGAAATACCGTATTCCATTCTACATGTCCACGGACTGTGAAAATCTG
 CTTAAGAAATTTCTCATACTTAATCCTAGTAAGAGAGGCCACTTTGGAGCAAATTAAGAAAGTCCGGTGA
 TGAATGTGGGCCATGAGGATGACGAGCTAAAGCCTTACGTGGAGCCACTCCCTGACTACAAGGATCCCCG
 GCGGACAGAGTTGATGGTGTCAATGGGTTACACACGGGAAGAGATCCAGGACTCGCTGGTAGGCCAGAGG
 TACAACGAAGTGATGGCTACCTATCTGCTCCTTGGCTACAAGAGCTCTGAGCTGGAAGGTGACACCATCA
 CTTTAAAGCCCCGGCCTTCAGTGATCTAACCAACAGCAGTGCCTCATCTCCACAAAGTTCCAGCG
 CAGCGTCTCTGCCAACCCCAAGCAGCGGCTCCAGTGACCAGGCCGTCCTCCGCAATTCACACTCGAAT
 TCTACTCTAAGAAGACTCAGAGTAACAACGCAGAAAATAAGCGGCTGAGGAAGAGACAGGCGGAAAG
 CCAGCAGCACCGCAAAGTGCCTGCCAGCCTCTGCCTGGCTGGACAGGAAGAAGACTCCTACCCC
 CTCCACAAACAGCGTCTCTCCACCAGCACAAACAGAAGCAGGAACTCCCCTTTTGGACAGGGCCAGC
 CTTGGCCAGGCTCCATCCAGAATGGTAAAGACAGCACAGCCCCCAGCGTGTCCCTGTGCGCTCCCCCT
 CCGCCCAACATCAGCAGCAGTAGTGGAGCCCCAGCCGAACTAATTTCCACGGGGTGTCCAGTCCG
 AAGCACCTTCCATGCTGGGAGTCCGACAGGTGCGGGACCAGCAGAATCTGCCCTTCGGTGTGACCCCA
 GCCTCACCTCTGGCCATAGCCAGGGCCGGCGGGGGCTCTGGCAGCATCTTCAGCAAGTTCACCTCCA
 AGTTTGTCCGCAGGAACCTGAATGAACCTGAAAGCAAAGACCGAGTGGAGACGCTCAGACCTCACGTGGT
 AGGCGGTGGAGGCACTGACAAGGAAAAGGAAGATTTCCGGGAGGCCAAGCCTCGTTCCCTGCGCTTCACT
 TGGAGCATGAAGACCACGAGCTCTATGGAGCCCAATGAGATGATGCGGGAGATCCGCAAGGTGCTGGACG
 CCAACAGCTGCCAAAGCGAGCTGCACGAGCGATACATGCTGCTGTGCGTGCATGGCACACCCGGCCACGA
 GAACTTTGTGAGTGGGAGATGGAGGTGTGAAACTGCCCCGGCTGTCTCAACGGTGTTCGGTTAAG
 CGGATATCGGGCACTTCCATGGCCTTCAAAAACATTGCCTCCAAAATAGCCAATGAGCTGAAGCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR208831 representing NM_021699
Red=Cloning site Green=Tags(s)

MSSARTPLPTLNERDTEQPTLGHLDSPSSKSNMLRGRNSATSADEQPHIGNYRLLKKTIGKGNFAKVKLA
 RHILTGKEVAVKIIDKTQLNSSSLQKLFREVRIMKVLNHPNIVKLFEVIETEKLYLVMYASGGEVFDY
 LVAHGRMKEKEARAKFRQIVSAVQYCHQKFIVHRDLKAENLLDADMNIKIADFGFSNEFTFGNKLDTFC
 GSPPYAAPELFQKKYDGPVDVWSLGVILYTLVSGSLPFDGQNLKELRERVLRGKYRIPFYMSTDCENL
 LKKFLILNPSKRGTLQIMKDRWMNVGHEDDELKPYVEPLPDYKDRRTELMVSMGYTREEIQDSLVGQR
 YNEVMATYLLLGYSSELEGDTITLKPRPSADLTNSSAPSPSHKVQSVSANPKQRRSSDQAVPAIPTSN
 SYSKKTQSNNANRPEEETGRKASSTAKVPASPLPGLDRKKTTPSTNSVLSTSTNRSRNSPLLDRAS
 LGQASIQNGKDSTAPQRPVAVSPSAHNISSSGAPDRTNFPRGVSSRSTFHAGLQRQVRDQNLPGVTP
 ASPSGHSQGRGASGSIFSFTSKFVRRNLNEPESKDRVETLRPHVVGGGTDKEEKFREAKPRSLRFT
 WSMKTTSSMEPNEMMREIRKVLANSQCSELHERYMLLCVHGTPGHENFVQWEMEVCKLPRLSLNGVRFK
 RISGTSMAFKNIASKIANELKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_021699

ORF Size: 2166 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_021699.1](#), [NP_067731.1](#)

RefSeq Size: 2572 bp

RefSeq ORF: 2169 bp

Locus ID: 60328

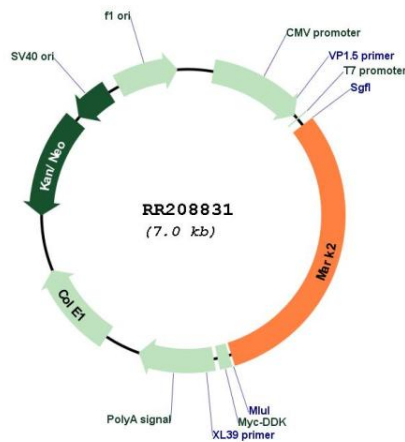
UniProt ID: [O08679](#)

Cytogenetics: 1q43

MW: 80.9 kDa

Gene Summary: kinase; phosphorylates the microtubule-associated proteins [RGD, Feb 2006]

Product images:



Circular map for RR208831