

Product datasheet for **RC228550**

MARK2 (NM_001163297) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MARK2 (NM_001163297) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MARK2
Synonyms:	EMK-1; EMK1; PAR-1; Par-1b; Par1b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC228550 representing NM_001163297
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCCAGCGCTCGGACCCCTACCCAGCTGAACGAGAGGGACACGGAGCAGCCACCTTGGGACACC
 TTGACTCCAAGCCAGCAGTAAGTCCAACATGATTCGGGGCCGCAACTCAGCCACCTCTGCTGATGAGCA
 GCCCCACATTGAAACTACCGGCTCCTCAAGACCATTGGCAAGGGTAATTTTGCCAAGGTGAAGTTGGCC
 CGACACATCCTGACTGGGAAAGAGGTAGCTGTGAAGATCATTGACAAGACTCAACTGAACTCCTCCAGCC
 TCCAGAACTATTCGCGAAGTAAGAATAATGAAGTTTTGAATCATCCCAACATAGTTAAATTATTTGA
 AGTGATTGAGACTGAGAAAACGCTCTACCTTGTTCATGGAGTACGCTAGTGGCGGAGAGGTATTTGATTAC
 CTAGTGGCTCATGGCAGGATGAAAGAAAAAGGGCTCGAGCCAAATTCGCCAGATAGTGTCTGCTGTGC
 AGTACTGTACCAGAAGTTTATTGTCCATAGAGACTTAAAGGCAGAAAACCTGCTCTTGATGCTGATAT
 GAACATCAAGATTGCAGACTTTGGCTTCAGCAATGAATCACCTTTGGGAACAAGCTGGACACCTTCTGT
 GGCAGTCCCCCTTATGCTGCCCAAGAACTTCCAGGGCAAAAAATATGATGGACCCGAGGTGGATGTGT
 GGAGCCTAGGAGTTATCCTCTATACACTGGTCAGCGGATCCCTGCCTTTTGATGGACAGAACCTCAAGGA
 GCTGCGGGAACGGGTAAGTACTGAGGGGAAAATACCGTATTCCATTCTACATGTCCACGGACTGTGAAAACCTG
 CTTAAGAAATTTCTATTCTTAATCCCAGCAAGAGAGGCACTTTAGAGCAAAATCATGAAAGATCGATGGA
 TGAATGTGGGTCACGAAGATGATGAACTAAAGCCTTACGTGGAGCCACTCCCTGACTACAAGGACCCCCG
 GCGGACAGAGCTGATGGTGTCCATGGGTATACACGGGAAGAGATCCAGGACTCGCTGGTGGCCAGAGA
 TACAACGAGGTGATGGCCACCTATCTGCTCCTGGGCTACAAGAGCTCCGAGCTGGAAGGCGACACCATCA
 CCCTGAAACCCCGCCTTCAGTGATCTGACCAATAGCAGCGCCCATCCCCATCCACAAGGTACAGCG
 CAGCGTGTGCGCCAATCCCAAGCAGCGCGCTTCAGCGACCAGGCTGGTCTCCTGCCATTCCACCTCTAAT
 TCTTACTTAAGAAGACTCAGAGTAACAACGCAGAAAATAAGCGGCTGAGGAGGACCGGGAGTCAGGGC
 GAAAAGCCAGCAGCACAGCCAAGGTGCCTGCCAGCCCCCTGCCCGGTCTGGAGAGGAAGAAGACCACCC
 AACCCCTCCACGAACAGCGTCTCTCCACCAGCACAAATCGAAGCAGGAATTCCCCACTTTTGGAGCGG
 GCCAGCTCGGCCAGGCCTCCATCCAGAATGGCAAAGACAGCACAGCCCCCAGCGTGTCCCTGTTGCCT
 CCCCATCCGCCACAACATCAGCAGCAGTGGTGGAGCCCCAGACCGAACTAACTCCCCGGGGTGTGTC
 CAGCCGAAGCACCTTCCATGCTGGCAGCTCCGACAGGTGCGGGACCAGCAGAATTTGCCCTACGGTGTG
 ACCCCAGCTCTCCCTCTGGCCACAGCCAGGGCCGGCGGGGGCCTCTGGGAGCATTTTCAGCAAGTTCA
 CCTCCAAGTTTGTACGCAGACCTCACGTGGTGGCAGTGGCGGCAACGACAAAGAAAAGGAAGAAATTCG
 GGAGGCCAAGCCCGCTCCCTCCGCTTACGTGGAGTATGAAGACCACGAGCTCCATGGAGCCCAACGAG
 ATGATGCGGGAGATCCGCAAGGTGCTGGACGCGAACAGCTGCCAGAGCGAGCTGCATGAGAAGTACATGC
 TGCTGTGCATGCACGGCACGCCGGGCCACGAGGACTTCGTGCAGTGGGAGATGGAGGTGTGCAAACCTGCC
 GCGGCTCTCTCAACGGGGTTCGATTTAAGCGGATATCGGGCACCTCCATGGCCTTCAAAAACATTGCC
 TCCAAAATAGCCAACGAGCTGAAGCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC228550 representing NM_001163297
 Red=Cloning site Green=Tags(s)

MSSARTPLPTLNERDTEQPTLGHLDSPSSKSNMIRGRNSATSADEQPHIGNYRLLKTIKGNFAKVKLA
 RHILTGKEVAVKIIDKTQLNSSSLQKLFREVRIMKVLNHPNIVKLFEVIETEKLYLVMYASGGEVFDY
 LVAHGRMKEKEARAKFRQIVSAVQYCHQKFIVHRDLKAENLLLDADMNIKIADFGFSNEFTFGNKLDTF
 GSPPYAAPELFGKKYDGPEDVWVSLGVILYTLVSGSLPFDGQNLKELRERVLRGKYRIPFYMSTDCENL
 LKKFLILNPSKRGTLQIMKDRWMNVGHEDDELKPYVEPLPDYKDPRTLMVSMGYTREEIQDSL VGQR
 YNEVMATYLLLGYSSELEGDTITLKPRPSADLTNSSAPSPSHKVQSVSANPKQRRFSDQAGPAIPTSN
 SYSKKTQSNNAENKRPEEDRESGRKASSTAKVPASPLPGLERKKTTPPTSTNSVLSTSTNRSRNSPLLER
 ASLQASIQNGKDSTAPQRPVSPSAHNISSSGGAPDRTNFPRGVSSRSTFHAGQLRQVRDQQLPYGV
 TPASPSGHSQRRGASGSIFSKFTSKFVRRPHVVGSGGNDKEEFREAKPRSLRFTWSMKTTSSMEPNE
 MMREIRKVL DANSCQSELHEKYMLLCMHGTPGHEDFVQWEMEVCKLPRLSLNGVRFKRISGTSMAFKNIA
 SKIANELKL

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_001163297

ORF Size: 2127 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_001163297.2](#)

RefSeq ORF: 2130 bp

Locus ID: 2011

UniProt ID: [Q7KZ17](#)

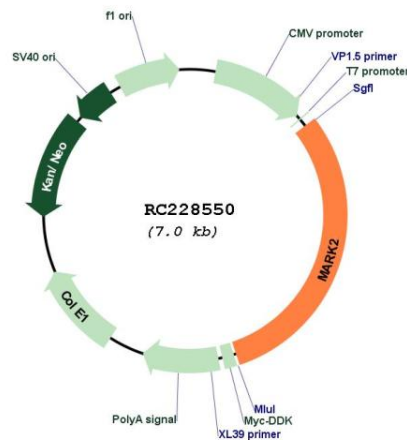
Cytogenetics: 11q13.1

Protein Families: Druggable Genome, Protein Kinase

MW: 79.2 kDa

Gene Summary: This gene encodes a member of the Par-1 family of serine/threonine protein kinases. The protein is an important regulator of cell polarity in epithelial and neuronal cells, and also controls the stability of microtubules through phosphorylation and inactivation of several microtubule-associated proteins. The protein localizes to cell membranes. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2009]

Product images:



Circular map for RC228550