

Product datasheet for **RC226070**

MARK3 (NM_001128921) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MARK3 (NM_001128921) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MARK3
Synonyms:	CTAK1; KP78; Par-1a; PAR1A; VIPB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC226070 representing NM_001128921
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCCACTAGGACCCCATTTGCCAACGGTGAATGAACGAGACACTGAAAACCACACGTCACATGGAGATG
GGCGTCAAGAAGTTACCTCTCGTACCAGCCGCTCAGGAGCTCGGTGTAGAACTCTATAGCCTCCTGTGC
AGATGAACAACCTCACATCGGAACTACAGACTGTTGAAAAACAATCGGCAAGGGGAATTTTGCAAAAAGTA
AAATTGGCAAGACATATCCTTACAGGCAGAGAGTTGCAATAAAAATAATTGACAAAACCTCAGTTGAATC
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CACTTGCTAAGGTTAGGCCGAGCAGTGATCTCAACAACAGTACTGGCCAGTCTCCTCACCACAAAGTGCA
GAGAAGTGTTTTTCAAGCCAAAAGCAAAGACGCTACAGTGACCATGCTGGACCAGCTATTCTTCTGTT
GTGGCGTATCCGAAAAGGAGTCAAGCCAGCACTGCAGATAGTGACCTCAAAGAAGATGGAATTTCTCC
GGAAATCAAGTGGCAGTGCTGTTGGAGGAAAGGGAATGCTCCAGCCAGTCCCATGCTTGGGAATGCAAG
TAATCCTAATAAGGCGGATATTCCTGAACGCAAGAAAAGCTCCACTGTCCCTAGTAGTAACACAGCATCT
GGTGAATGACACGACGAAATACTTATGTTTGCAGTGAGAGAACTACAGCTGATAGACACTCAGTGATTC
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TGCAGCCACCCAGATCGAATCCGCTTCCCAAGAGGCACTGCCAGTCGTAGCACTTTCCACGGCCAGCCC
CGGGAACGGCGAACCAGCAACATAAATGGCCCTCCTGCCTCTCCAGCCTGTCCCATGAAGCCACACCAT
TGTCCCAGACTCGAAGCCGAGGCTCCACTAATCTCTTTAGTAAATTAACCTCAAACCTCACAGGAGAAA
CATGTCATTCAAGTTTATCAAAAGTCGAATGTATCTGCTGAGCAAAAAGATGAAAACAAAGAAGCAAAG
CCTCGATCCCTACGCTTACCTGGAGCATGAAAACCACTAGTTCAATGGATCCCAGGACATGATGCGGG
AAATCCGCAAAGTGTGGACGCCAATAACTGCGACTATGAGCAGAGGGAGCGCTTCTTGCTTTCTGCGT
CCACGGAGATGGGCACGCGGAGAACCTCGTGAGTGGGAAATGGAAGTGTGCAAGCTGCCAAGACTGTCT
CTGAACGGGGTCCGGTTAAGCGGATATCGGGGACATCCATAGCCTTCAAAAATATTGCTTCAAAAATTG
CCAATGAGCTAAAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226070 representing NM_001128921
 Red=Cloning site Green=Tags(s)

MSTRTPPLPTVNERDTENHTSHGDGRQEVTSRTSRSGARCRNSIASCADQPHIGNYRLKLTIGKGNFAKV
 KLARHILTGREVAIKIIDKTLNPTSLQKLFREVRIMKILNHPNIVKLFVETETKTLYLIMEYASGGEV
 FDYLVAHGRMKEKEARSKFRQIVSAVQYCHQKRIVHRDLKELRERVLRGKYRIPFYMSTDCENLLKRFV
 LNPIKRGTLQIMKDRWINAGHEEDELKPFVEPELDISDQKRIDIMVGMGYSQEEIQESLSKMKYDEITA
 TYLLLGRKSSSELDASDSSSSNLSLAKVRPSSDLNNSTGQSPHHKVQRSVFSSQKQRRYS DHAGPAIPSV
 VAYPKRSQTSTADSDLKEDGISSRKSSGSAVGGKIAPASPMLGNASNPKNADIPERKKSSTVPSSNTAS
 GGMTRRNTYVCSERTTADRHSVIQNGKENSTIPDQRTPVASTHSISSAATPDRIRFRPGTASRSTFHGQP
 RERRTATYNGPPASPSLSHEATPLSQTRSRGSTNLF SKL TSKL TRRNMSFRF IKS RNVS AEQK DENKEAK
 PRSLRFTWSMKTTSMDPGDMMREIRKVL DANNC DYE Q RER FLL F CVHGDGHAENLVQWEME VCKL PRLS
 LNGVRFKRISGTSIAFKNIASKIANELKL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3921_a01.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_001128921

ORF Size: 1977 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001128921.1](#), [NP_001122393.1](#)

RefSeq ORF: 1980 bp

Locus ID: 4140

UniProt ID: [P27448](#)

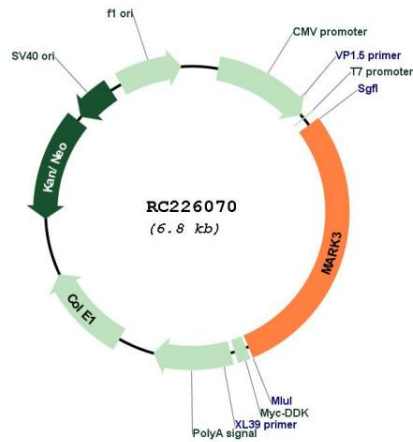
Cytogenetics: 14q32.32-q32.33

Protein Families: Druggable Genome, Protein Kinase

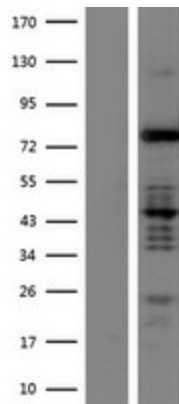
MW: 74 kDa

Gene Summary: The protein encoded by this gene is activated by phosphorylation and in turn is involved in the phosphorylation of tau proteins MAP2 and MAP4. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

Product images:



Circular map for RC226070



Western blot validation of overexpression lysate (Cat# [LY427023]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226070 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).