

Product datasheet for **RG222580**

MARK4 (NM_031417) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MARK4 (NM_031417) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MARK4
Synonyms:	MARK4L; MARK4S; MARKL1; MARKL1L; PAR-1D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG222580 representing NM_031417
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCTTCGCGGACGGTCTGGCCCCGGGCAACGATCGGAACTCGGACACGCATGGCACCTTGGGCAGTG
GCCGCTCCTCGGACAAAGGCCCGTCTGGTCCAGCCGCTCACTGGGTGCCGTTGCCGAACTCCATCGC
CTCCTGTCCCAGGAGCAGCCCCACGTGGGCAACTACCGCTGCTGAGGACCATTGGGAAGGGCAACTTT
GCCAAAGTCAAGCTGGCTCGGCACATCCTCACTGGTCTGGGAGGTTGCCATCAAGATTATCGACAAAACCC
AGCTGAATCCCAGCAGCCTGCAGAAGCTGTTCCGAGAAGTCCGCATCATGAAGGGCTAAACCACCCCAA
CATCGTGAAGCTCTTTGAGGTGATTGAGACTGAGAAGACGCTGTACCTGGTGATGGAGTACGCAAGTGCT
GGAGAAGTGTGGACTACCTCGTGTGCATGGCCGCATGAAGGAGAAGGAAGCTCGAGCCAAGTCCGAC
AGATTGTTTCGGCTGTGCACTATTGTACCAGAAAAATATTGTACACAGGGACCTGAAGGCTGAGAACCT
CTTGCTGGATGCCGAGGCCAACATCAAGATTGCTGACTTTGGCTTCAGCAACGAGTTCACGCTGGGATCG
AAGCTGGACACGTTCTGCGGGAGCCCCATATGCCGCCCGGAGCTGTTTCAGGGCAAGAAGTACGACG
GGCCGGAGGTGGACATCTGGAGCCTGGGAGTCATCCTGTACACCCCTGTCAGCGGCTCCCTGCCCTTCGA
CGGGCACAACTCAAGGAGCTGCGGGAGCGAGTACTCAGAGGGAAGTACCGGGTCCCTTTTCTACATGTCA
ACAGACTGTGAGAGCATCCTGCGGAGATTTTTGGTGTGAACCCAGCTAAACGCTGTACTCTCGAGCAAA
TCATGAAAGACAAATGGATCAACATCGGCTATGAGGGTGAAGGTTGAAGCCATACACAGAGCCCGAGGA
GGACTTCGGGGACACCAAGAGAATTGAGGTGATGGTGGGTATGGGCTACACACGGGAAGAAATCAAAGAG
TCCTTGACCAGCCAGAAGTACAACGAAGTGACCGCCACCTACCTCCTGCTGGGCAGGAAGACTGAGGAGG
GTGGGGACCGGGCGCCCGAGGGCTGGCCCTGGCACGGGTGCGGGCGCCAGCGACACCAACCGGAAC
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CGGAAGGACAGCAGCAGCACCCCAACAACCTCCCTCCTAGCATGATGACCCGACAGAACACCTACGTTT
GCACAGAACGCCCGGGGCTGAGCGCCCGTCACTGTTGCCAAATGGGAAAGAAAACAGCTCAGGCACCCC
ACGGGTGCCCCCTGCCTCCCCCTCCAGTACAGCCTGGCACCCCATCAGGGGAGCGGAGCCGCCTGGCA
CGCGGTTCCACCATCCGACGACCTTCCATGGTGGCCAGGTCCGGGACCGCGGGCAGGGGTGGGGGTG
GTGGGGTGTGCAGAATGGGCCCTGCCTCTCCACACTGGCCCATGAGGCTGCACCCCTGCCCGCCGG
GCGGCCCGCCCAACCAACCTTCCACCAAGCTGACCTCAAACCTGACCCGAAGGGTTACCTCGAT
CCCTCTAAACGGCAGAATCTAACCGCTGTGTTTCGGGCGCCTCTCTGCCCCAGGGATCCAAGATCAGGT
CGCAGACGAACCTGAGAGAATCGGGGACCTGAGGTCACAAGTTGCCATCTACCTGGGATCAAACGGAA
ACCGCCCCCGGCTGCTCCGATCCCCTGGAGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG222580 representing NM_031417
 Red=Cloning site Green=Tags(s)

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MSSRTLAPGNDNRNSDTHGTLGSGRSSDKGPSWSSRSLGARCNSIASCPEEQPHVGNRYLLRRTIGKGNF
AKVKLARHILTGREVAIKIIDKTLQNPSSLQKLFREVRIMKGLNHPNIVKLFVETIEKTLVLMVEYASA
GEVFDYLVSHGRMKEKEARAKFRQIVSAVHYCHQKNIIVHRDLKAENLLDAEANIKIADFGFSNEFTLGS
KLDFTFCGSPPYAAPELFGKKYDGPVVDIWSLGVILYTLVSGSLPFDGHNKELRERVLRGKYRVPFVMS
TDCESILRRFLVLPNPAKRCTLEQIMKDKWINIGYEGEELKPYTEPEEDFGDTKRIEVMVGMGYTREEIKE
SLTSQKYNEVTATYLLLGRKTEEGDRGAPGLALARVRAPSDTTNGTSSSKGTSHSKGQRSSSSTYHRQR
RHSDFCGSPAPLHPKRSPTSTGEAELKEERLPGRKASCSTAGSGRGLPPSSPMVSSAHNPNAEIPER
RKDSTSTPNLPPSMMTRRNTYVCTERPGAERPSLLPNGKENSSTGTPRVPPASPSHSLAPPSGERSRLA
RGSTIRSTFHGGQVDRRAGGGGGGGVQNGPPASPTLAHEAAPLPAGRPRPTNLFKLTSLKLRRTVLD
PSKRQNSNRCVSGASLPQGSKIRSQTNLRESGDLRSQVAIYLGIKRKPSPGSDSPGV
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TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_031417

ORF Size: 2064 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_031417.3](#)

RefSeq Size: 4917 bp

RefSeq ORF: 2067 bp

Locus ID: 57787

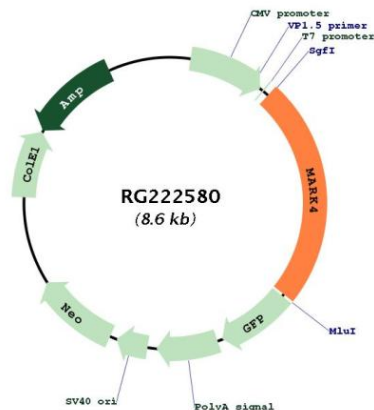
UniProt ID: [Q96L34](#)

Cytogenetics: 19q13.32

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: This gene encodes a member of the microtubule affinity-regulating kinase family. These protein kinases phosphorylate microtubule-associated proteins and regulate the transition between stable and dynamic microtubules. The encoded protein is associated with the centrosome throughout mitosis and may be involved in cell cycle control. Expression of this gene is a potential marker for cancer, and the encoded protein may also play a role in Alzheimer's disease. Pseudogenes of this gene are located on both the short and long arm of chromosome 3. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]

Product images:



Circular map for RG222580