

Product datasheet for **SC113408**

MARK1 (NM_018650) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MARK1 (NM_018650) Human Untagged Clone
Tag:	Tag Free
Symbol:	MARK1
Synonyms:	MARK; Par-1c; Par1c
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_018650 edited
ATGTCGGCCCGGACGCCATTGCCGACGGTGAACGAGCGGGACACGGAAAATCATACATCT
GTGGATGGATATACTGAACCACACATCCAGCCTACCAAGTCGAGTAGCAGACAGAATC
CCCCGGTGTAGAACTCCATTACGTGAGCAACAGATGAACAGCCTCACATTGGAAATTAC
CGTTTACAAAAACAATAGGGAAGGAAATTTTCCAAAGTCAAATTGGCAAGACACGTT
CTAACTGGTAGAGAGGTTGCTGTGAAAAAATAGACAAAACTCAGCTAAATCCTACCAGT
CTACAAAAGAAAATATCTACCTGTTTTCTTTAACAGTTATTTTCGAGAAGTACGAAAT
GAAGATACTGAATCATCCTAATATAGTAAAATTGTTTGAAGTTATTGAAACAGAGAAGAC
TCTCTATTTAGTCATGGAATACGCGAGTGGGGTGAAGTATTTGATTACTTAGTTGCCCA
TGGAGAATGAAAGAGAAAAGAGGCCCGTCAAAAATTTAGGCAGATTGTATCTGCTGTACA
GTATTGTCATCAAAGTACATTGTTACCCGTGATCTTAAGGCTGAAAACCTTCTCCTTGA
TGGTGATATGAATATTAATTTGCTGACTTTGGTTTTAGTAATGAATTTACAGTTGGGAA
CAAATTGGACACATTTTGTGAAGCCACCTATGCTGCTCCCGAGCTTTTCCAAGGAAA
GAAGTATGATGGCCTGAAGTGGATGTGTGGAGTCTGGGCGTCATTCTCTATACATTAGT
CAGTGGCTCCTTGCCTTTTCGATGCCAGAAATTAAGGAACTGCGAGAGCGAGTTTTACG
AGGGAAGTACCGTATTCCCTTCTATATGTCCACAGACTGTGAAAATCTTCTGAAGAAAT
ATTAGTCTGAATCCAATAAAGAGAGGCAGCTTGAACAATAATGAAAGATCGATGGAT
GAATGTTGGTCATGAAGAGGAAGAACTAAAGCCATATACTGAGCCTGATCCGGATTTCAA
TGACACAAAAAGAATAGACATTATGGTCACCATGGGCTTTGCACGAGATGAAATAAATGA
TGCCTTAATAAATCAGAAGTATGATGAAGTTATGGCTACTTATATTCTTCTAGGTAGAAA
ACCACCTGAATTTGAAGTGGTGAATCGTTATCCAGTGGAACTTGTGTCAGAGGTCCCG
GCCAGTAGTGACTTAACAACAGCACTTTCAGTCCCCTGCTCACCTGAAGTCCAGAG
AAGTATCTCAGCAAATCAGAAGCAGCGGGTTCAGTGATCTGCTGGTCCATCCATTCC
TCCTGCTGTATCATATACCAAAGACCTCAGGCTAACAGTGTGGAAAGTGAACAGAAAAGA
GGAGTGGGACAAAAGATGTGGCTCGAAAATTTGGCAGCACAAAGTTGGATCAAAAAGCGA
GATGACTGCAAGCCCTCTGTAGGGCCAGAGAGGAAAAATCTTCAACTATTCCAAGTAA
CAATGTGTATTCTGGAGGTAGCATGGCAAGAAGGAATACATATGTCTGTGAAAGGACCAC
AGATCGATACGTAGCATTGCAGAATGGAAAAGACAGCAGCCTTACGGAGATGTCTGTGAG
TAGCATATCTTCTGCAGGCTCTTCTGTGGCCTCTGCTGTCCCCTCAGCACGACCCCGCCA
CCAGAAGTCCATGTCCACTTCTGGTCATCTATTAAGTACACTGCCAACCATTAAGA
CGGCTCTGAAGCTTACCGCCTGGTACAACCCAGAGAGTGCCTGTGCTTCCCCATCTGC
TCACAGTATTAGTACTGCGACTCCAGACCGGACCCGTTTTCCCGAGGGAGCTCAAGCCG
AAGCACTTTCCATGGTGAACAGCTCCGGGAGCGACGCAGCGTTGCTTATAATGGGCCACC
TGCTTCACCATCCCATGAAACGGGTGCATTTGCACATGCCAGAAGGGGAACGTCAACTGG
TATAATAAGCAAAATCACATCCAATTTGTTCCGAGGGATCCAAGTGAAGGCGAAGCCAG
TGGCAGAACCGACACCTCAAGAAGTACATCAGGGGAACCAAAAAGAAAGAGACAAGGAAGA
GGGTAAGATTCTAAGCCGCTTCTTTGCGGTTTACATGGAGTATGAAGACCACTAGTTC
AATGGACCCTAATGACATGATGAGAGAAATCCGAAAAGTGTAGATGCAAATAACTGTGA
TTATGAGCAAAAAGAGAGATTTTTGCTTTTCTGTGTCCATGGAGACGCTAGACAGGATAG
CCTCGTGCAGTGGGAGATGGAAGTCTGCAAGTTGCCACGACTGTCACTTAATGGGTTTCG
CTTCAAGCGAATATCTGGACATCTATTGCCTTTAAGAACATTGCATCAAAAATAGCAAA
TGAGCTTAAGCTGTAAAGAAGTCCAATTTACAGGTTACAGGAAGATACATACATATATG
AGGTACAGTTTTTGAATGTACTGGTAATGCCTAATGTGGTCTGCCTGTGAATCTCCCAT
GTAGAATTTGCCCTAATGCAATAAGGTTATACATAGTTATGAACTGAAAAATTAAGTC
AGTATGAACTATAATAAATATCTGTAGCTTAAAAAGTAGGTTACATGTACAGGTAAGTA
TATTGTGATTTTCTGTTCAATTTCTGTTTATAGAGTTGTATAATAAAACATGATTGCTTA
AAAATTTGAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAATCGACTCTAGATTGCGGCC
GCGGTCATAGCAGTTTCTGAACAGATCCCGGGTGGCATCC
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_018650 unedited
 GGTTCAAATATTTGTATACGACTCACTATAGGGGGCGGCCGCAATTCGGCACGAGGCA
 GCGCCGGGCAACCGCCTCGCCCGAAGCCCTCCCTCGTTACTGTCCGCATACCCCGCGGC
 GCCCGCGGGGAAGCGGCTCCCCCTCTTCTCCGCGTCTCTTCCCTCTTTCCCCCG
 CCGGGCCGCTTGTTCACCGCCCGCGGCCTGCGGGAGCCGCTCGCCCGGCCTTGTGC
 TCGCGTCCGACCCCTTCTGTGCCCCCGGGCCCGCACCACAGCCCGCGCGGAG
 ACCCGGCCAGACCCCGCTGCCCGCAGAAAATGTCGGCCCGGACGCCATTGCCGACGGTG
 AACGAGCGGGACACGGAAAATCATACATCTGTGGATGGATATACTGAACCACACATCCAG
 CCTACCAAGTCGCGTAGCAGACAGAACATCCCCGGTGTAGAAATCCATTACGTCAGCA
 ACAGATGAACAGCCTCACATTGGAAATTACCGTTTACAAAAACAATAGGGAAGGAAAT
 TTTGCCAAAGTCAAATTGGCAAGACACGTTCTAACTGGTAGAGAGTTGCTGTGAAAATA
 ATAGACAAAACCTCAGCTAAATCTACCAGTCTACANAAGAAATATATCTACCTGTTTTCT
 TTAACAGTTATTTGAGAAGTACGAATAATGAAGATACTGAATCATCCTAATATAGTAAA
 ATTTGTCTGAAGTATTGAAACAGAGAAGACTCTCTATCTAGTCATGCAATACGCGAGTG
 GGGGTGAAGTATTTGATTACTTAGTTGCCCATGGAAGATTGAAAGAGAAAAGCCCGTG
 CAAAATTAGGCAGATTTATCTGCTGCCAGATTGTCATAAAATACATGGTCACCGTGAT
 CTAGGCTGAAACCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_018650 unedited
 CGCGGCCCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTACAAGT
 TTTTAAGCAATCATGTTTTATTATACAACCTCTATGAACAGAAAATGAACAGAAATACACA
 ATATACTTACCTGTACATGTGAACCTACTTTTTAAGCTACAGATATTTATTATAGTTCAT
 ACTGACTTTAATTTACAGTTCATAACTATGTATAACCTTATTGCATTAAGGGCAAATTC
 TACATGGGAGATTACAGGCAGACCACATTAGGCATTACAGTACATCAAAAACCTGTA
 CCTCATATATGTATGTATCTTCCCTGAACCTGTAATTTGGACTTCTTTACAGCTTAAGC
 TCATTTGCTATTTTTGATGCAATGTTCTTAAAGGCAATAGATGTCCAGATATTCGCTTG
 AAGCGAACCCCATTAAGTGACAGTCGTGGCAACTTGCAGACTTCCATCTCCCACTGCACG
 AGGCTATCCTGTCTAGCGTCTCCATGGACACAGAAAAGCAAAAATCTCTTTTTTGCTCA
 TAATCACAGTTATTTGCATCTAACACTTTTCGGATTTCTCTCATCATGTCATTAGGGGCC
 ATTGAAC TAGTGGTCTTCATACATCCATGTGAAACCGCAAGAACGCGGCTTAAAATCTTTA
 CCTCTTCTTGGCTCTTTCTTTGGGNTCCCTGATGTACTTCTTGGAGGGGTCGGNNTC
 TGCCACTGGCTTCGCTTCACTTGGGATCCCTGCGAAAAATTGGGATGTGATTTTGCTTA
 TATACCAATTGACGGTCCCTTCTTGGATGTGCAATGCCACCCGTTTCATGGGAGGGGAA
 ACAGGTGGCCCTTATAGCCACGCTGGGTCGCTTCGGACCTGTTACATTGAAAGGCTTC
 GTTTGACCCCTCGGAAACGGGTCCGTCTGATTCCAGACTAAACGGGACAAAG

Restriction Sites:

NotI-NotI

ACCN:

NM_018650

Insert Size:

3180 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_018650.2 , NP_061120.2
RefSeq Size:	4638 bp
RefSeq ORF:	2277 bp
Locus ID:	4139
UniProt ID:	Q9P0L2
Cytogenetics:	1q41
Domains:	UBA, pkinase, TyrKc, KA1, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>Serine/threonine-protein kinase (PubMed:23666762). Involved in cell polarity and microtubule dynamics regulation. Phosphorylates DCX, MAP2 and MAP4. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:23666762). Involved in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) uses an alternate in-frame splice site compared to variant 1. The encoded isoform (2) is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>