

Product datasheet for **SC114124**

MARK2 (NM_017490) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MARK2 (NM_017490) Human Untagged Clone
Tag:	Tag Free
Symbol:	MARK2
Synonyms:	EMK-1; EMK1; PAR-1; Par-1b; Par1b
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF:

```

>OriGene ORF sequence for NM_017490 edited
ATGATTCGGGGCCGCAACTCAGCCACCTCTGCTGATGAGCAGCCCCACATTGGAACTAC
CGGCTCCTCAAGACCATTGGCAAGGTAATTTTGCCAAGGTGAAGTTGGCCCGACACATC
CTGACTGGGAAAGAGGTAGCTGTGAAGATCATTGACAAGACTCAACTGAACTCCTCCAGC
CTCCAGAACTATTCCGCGAAGTAAGAATAATGAAGTTTTGAATCATCCCAACATAGTT
AAATTATTTGAAGTGATTGAGACTGAGAAAACGCTCTACCTTGTGATGGAGTACGCTAGT
GGCGGAGAGGTATTTGATTACCTAGTGGCTCATGGCAGGATGAAAGAAAAAGAGGCTCGA
GCCAAATTCCGCCAGATAGTGTCTGCTGTGCAGTACTGTACCAGAAGTTTATTGTCCAT
AGAGACTTAAAGGCAGAAAACCTGCTCTTGATGCTGATATGAACATCAAGATTGCAGAC
TTTGGCTTCAGCAATGAATTCACCTTTGGGAACAAGCTGGACACCTTCTGTGGCAGTCCC
CCTTATGTGCCCCAGAACTCTCCAGGGCAAAAAATATGATGGACCCGAGGTGGATGTG
TGGAGCCTAGGAGTTATCCTCTATACACTGGTCAGCGGATCCCTGCCTTTTGTGGACAG
AACCTCAAGGAGCTGCGGAAACGGGTAAGGGGAAAAATACCGTATTCCATTCTACATG
TCCACGGACTGTGAAAACCTGCTTAAGAAATTTCTCATTCTTAATCCCAGCAAGAGAGGC
ACTTTAGAGCAAATCATGAAAGATCGATGGATGAATGTGGGTACGAAGATGATGAACTA
AAGCCTTACGTGGAGCCACTCCCTGACTACAAGGACCCCGGGCGACAGAGCTGATGGTG
TCCATGGGTTATACACGGGAAGAGATCCAGGACTCGCTGGTGGGCCAGAGATACAACGAG
GTGATGGCCACCTATCTGCTCCTGGGCTACAAGAGCTCCGAGCTGGAAGGCGACACCATC
ACCCTGAAACCCCGGCCTTCAGCTGATCTGACCAATAGCAGCGCCCCATCCCCATCCCAC
AAGGTACAGCGCAGCGTGTGCGCAATCCCAAGCAGCGGCGCTTCAGCGACCAGGCTGGT
CCTGCCATTCCCACCTAATTTACTCTAAGAAGACTCAGAGTAACAACGCAGAAAAT
AAGCGGCTGAGGAGGACCGGGAGTCAGGGCGGAAAGCCAGCAGCACAGCCAAGTGCCT
GCCACCCCTGCCCCGTGAGAGGAAAGAACCCCAACCCCTCCACGAACAGC
GTCCTCTCCACCAGCACAAATCGAAGCAGGAATCCCCACTTTTGGAGCGGGCCAGCCTC
GGCCAGGCTCCATCCAGAATGGCAAAGACAGCACAGCCCCCAGCGTGTCCCTGTTGCC
TCCCCATCGCCACAACATCAGCAGCAGTGGTGGAGCCCCAGACCGAACTAACTCCCC
CGGGGTGTGTCCAGCCGAAGCACCTTCCATGCTGGGCAGCTCCGACAGGTGCGGGACCAG
CAGAAATTTGCCCTACGGTGTGACCCAGCCTCTCCCTCTGGCCACAGCCAGGGCCGGCGG
GGGGCCTCTGGGAGCATTTAGCAAGTTCACCTCCAAGTTTGTACGCAGAAATCTGTCT
TTCAGTTTGGCAGAAGACCTCACGTGGTGGCAGTGGCGCAACGACAAAGAAAAGGAA
GAATTTGGGAGGCCAAGCCCCGCTCCCTCCGCTTACAGTGGAGTATGAAGACTACGAGC
TCCATGGAGCCCAACGAGATGATGCGGGAGATCCGCAAGGTGCTGGACCGGAACAGCTGC
CAGAGCGAGCTGCATGAGAAGTACATGCTGCTGTGATGCACGGCAGCCGGGCCACGAG
GACTTCGTGCAAGTGGGAGATGGAGGTGTGCAAACCTGCCGCGGCTCTCTCAACGGGTT
CGATTTAAGCGGATATCGGGCACCTCCATGGCCTTCAAAAACATTGCCTCCAAAATAGCC
AACGAGCTGAAGCTTTAACAGGCTGCCAGGAGCGGGGGCGGGGGGGCGGGCCAGCTGGA
CGGGCTGCCGGCCGCTGCGCCGCCACCTGGGCGAGACTGCAGCGATGGATTGGTGTGT
CTCCCCGTGCTGGCACTTCTCCCTCCCTGGCCCTTCTCAGTTTTCTTACATGTTTGTG
GGGGTGGGAGATTGTTCTCAGCCCCCACATTACCCCTGCCAGAGATTCCCCCTTC
TCCTCTCCCTACTGGAGGCAAAGGAAGGGAGGTTGATGGGGGGCAGGGCTCCCCCT
CGTACTGCGGTTGCACAGAGTATTTGCCTAAACCAAGAAATTTTTATTACAAAAAG
AAAAAAAAAAAAAAAAAACTCGACTCTAGATTGCGGCCGCGTATAGCTGTTTCTGAA
CAGATCCCGGGTGGCATCCCTGTGACCCCTCCCCAGTGCCTCTCCTGGCCCTGGAAGTTG
CCACTCCAGTGCCACCAGCCTTGTCTAATAAAATTAAGTTGCATCATTTTGTCTGACT
AGGTGTCCTTCTATAATATTATGGGGTGGAGGGGGTGGTATGGAGCAAGGGCAAGTTG
GGAAGACAACCTGTAGGGCTGCGGGTCTATTGGGAACCAAGCTGGAGTGCAGTGGCAC
AATCTTGGCTCACTGCAATCTCCGCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTC
CCGAGTTGTTGGATTCCAGGCATGCATGACCAGGCTCAGCTAATTTTTGTTTTTTGGT
AGAGACGGGGTTTACCATATTGGCCAGGCTGGTCTCAAACCTCTAATCTCAGGTGATCT
ACCCACCTTGGCCTCCCAAATTGCTGGGATTACAGGCGTGAACCACTGCTCCCTCCCTG
TCCTTCTGATTTTAAATAACTATACCAGCGGGAGGACGTCCAGACACAGCA
    
```

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_017490 unedited
GTAATACGACTTTCTATAGGGCGGCCGGAATTCGGCACGAGGCTGAACGAGAGGGACAC
GGAGCAGCCCACCTTGGGACACCTTGACTCCAAGCCCAGCAGTAAGTCCAACATGATTTCG
GGGCCGCAACTCAGCCACCTCTGCTGATGAGCAGCCCCACATTGGAACTACCGGCTCCT
CAAGACCATTGGCAAGGTAATTTTGCCAAGGTGAAGTTGGCCCGACACATCCTGACTGG
GAAAGAGGTAGCTGTGAAGATCATTGACAAGACTCAACTGAACTCCTCCAGCCTCCAGAA
ACTATTCCGCGAAGTAAGAATAATGAAGTTTTGAATCATCCCAACATAGTTAAATTATT
TGAAGTGATTGAGACTGAGAAAACGCTCTACCTTGTCTGAGTACGCTAGTGGCCGAGA
GGTATTTGATTACCTAGTGGCTCATGGCAGGATGAAAGAAAAAGAGGCTCGAGCCAAATT
CCGCCAGATAGTGTCTGCTGTGCAGTACTGTCACCAGAAGTTTATTGTCCATAGAGACTT
AAAGGCAGAAAACCTGCTCTTGGATGCTGATATGAACATCAAGATTGCAGACTTTGGCTT
CAGCAATGAATTCACCTTTGGGAACAAGCTGGACACCTTCTGTGGCAGTCCCCCTATGC
TGCCCCAGAACTTCCAGGGCANAAAATATGATGGACCCGAGGTGGATGTGTGGAGCCT
ANGAGTTATCCTCTATACACTGGTCAGCGGATCCCTGCCTTTTGTGGACAGAACCCTCA
AGAGCTGCGGGAACGGGTACTGANGGGGAAAATACCGTATTCCATTCTACATGTCCACGG
ACTGTGGAAACCTGCTTAAAGAAATCTCATTNCTAATCCAGCAGAGAGCACTTANAGCN
ATCATGAAGATCGATNATGAATGGGNTACGAANATGAGAACTAAGNCCCTACGTGGACCA
CTNCTGACTCAGGACCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_017490 unedited
GCCTATGGACCGCGCCGATNCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGTA
ATAAAAAATTTCTTGGTTTAGGGGAAATACTCTGTGCAACCGCAGTACCGAGGGGGAGCC
CTGCCCCCCCATCCACCCTCCCCTTCCCTTGCCTCCAGTAGGGGAGAGGAGAAGGGGGAA
TCTCTGGGCAGGGTGAATGTGGGGNCTNNNNAANNNNNCCCNCCCCCNCCCNCCCC
CCCCCNCCNCCNCCCCCTTTCCCCCCCCNCCNCCCCCCCCCCCCCCCCCNCCCCCCCC
CCCCNCCCCCNCCCCCCCCNCCNCCCCCCCCCCCCCCCCCCCCCNCCCCCNCCCC
NCCCCCNCCCCCCCCCNCCCCCTCCCCCNCCCCCCCCCNCCCCCCCCCNCCCCCCCCN
CCCCCNCCCCCCCCCCCCCCCCCNCCCCCNCCCCCCCCCCCCCCCCCNCCCCNCCCC
CNCCCCNCCCCNCCCCCNCCCCCNCCCCCNCCCCCNCCCCCNCCCCCNCCCCCNCCCC
CNCCCCCTCCCCCNCTCCCCCCTCCCCCTTTCTTCTCCCTCNCTGTCTTCTTCTCC
CTCCCCCTTTTCCCCCNCTTTCCCCTTTTCTCCCCCCTCCTCTTTTNTCCCCC
TTTTCTTGTTTTCCCTTCCCCCTTTCTCCTCTTTTTTCCCTTTTTTCCCTCTCCCT
TTTCCCCCTCCCTTCTCCCTTCTCCTTCTCCTCCTCTTTTCTTCTTTTTTCTTTT
TCTTTT

Restriction Sites:

NotI-NotI

ACCN:

NM_017490

Insert Size:

2700 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:

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_017490.1](#), [NP_059672.1](#)

RefSeq Size: 2946 bp

RefSeq ORF: 2238 bp

Locus ID: 2011

UniProt ID: [Q7KZ17](#)

Cytogenetics: 11q13.1

Domains: UBA, pkinase, KA1

Protein Families: Druggable Genome, Protein Kinase

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-associating proteins. The protein localizes to cell membranes. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2009]

Transcript Variant: This variant (1) represents use of an alternate promoter and 5' UTR, uses a downstream start codon, lacks an in-frame exon, and uses an alternate in-frame splice site, compared to variant 4. The resulting isoform (a) has a shorter N-terminus and lacks an internal segment and 1 internal residue, compared to isoform d. 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.