

Product datasheet for **SC323372**

MARK3 (NM_002376) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MARK3 (NM_002376) Human Untagged Clone
Tag:	Tag Free
Symbol:	MARK3
Synonyms:	CTAK1; KP78; Par-1a; PAR1A; VIPB
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_002376, the custom clone sequence may differ by one or more nucleotides

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ATGTCCTACTAGGACCCCATTTGCCAACGGTGAATGAACGAGACACTGAAAACACACGTGACATGGAGATG
GGCGTCAAGAAGTTACCTCTCGTACCAGCCGCTCAGGAGCTCGGTGTAGAACTCTATAGCCTCCTGTGC
AGATGAACAACCTCACATCGGAACTACAGACTGTTGAAAAAATCGGCAAGGGGAATTTGCAAAAAGTA
AAATTGGCAAGACATATCCTTACAGGCAGAGAGTTGCAATAAAAAATAATTGACAAAACAGTTGAATC
CAACAAGTCTACAAAAGCTCTTACAGAGAAGTAAGAATAATGAAGATTTTAAATCATCCCAATATAGTGAA
GTTATTGGAAGTCATTGAAACTGAAAAACACTTACCTAATCATGGAATATGCAAGTGGAGGTGAAGTA
TTTGACTATTTGGTTGCACATGGCAGGATGAAGGAAAAAGAAGCAAGATCTAAATTTAGACAGATTGTGT
CTGCAGTTCAATACTGCCATCAGAAACGGATCGTACATCGAGACCTCAAGGCTGAAAATCTATTGTTAGA
TGCCGATATGAACATTAAGTAGCAGATTTCCGTTTTAGCAATGAATTTACTGTTGGCGGTAACCTCGAC
ACGTTTTGTGGCAGTCTCCATACGCAGCACCTGAGCTCTCCAGGGCAAGAAATATGACGGGCCAGAAG
TGGATGTGTGGAGTCTGGGGTCATTTTATACACTAGTCAGTGGCTCACTTCCCTTTGATGGGCAAAA
CCTAAAGGAACTGAGAGAGAGATTAAGAGGGAAATACAGAATTCCTTCTACATGTCTACAGACTGT
GAAAACCTTCTCAACGTTTCTGGTGCTAAATCCAATTAACCGCGCACTCTAGAGCAAATCATGAAGG
ACAGGTGGATCAATGCAGGGCATGAAGAAGATGAACTCAAACATTTGTTGAACCAGAGCTAGACATCTC
AGACCAAAAAAGAATAGATATTATGGTGGGAATGGGATATTCACAAGAAGAAATTCAGAATCTCTTAGT
AAGATGAAATACGATGAAATCACAGCTACATATTTGTTATTGGGGAGAAAATCTCAGAGCTGGATGCTA
GTGATTCAGTTCTAGCAGCAATCTTCACTTGCTAAGGTTAGGCCGAGCAGTGATCTCAACAACAGTAC
TGGCCAGTCTCCTCACCACAAAGTGCAGAGAAGTGTTTTTCAAGCCAAAAGCAAAGACGCTACAGTGAC
CATGTGGACCAGCTATTCCTTCTGTTGTGGCGTATCCGAAAAGGAGTCAGACCAGCACTGCAGATAGTG
ACCTCAAAGAAGATGGAATTTCTCCCGAAATCAAGTGCGAGTCTGTTGGAGGAAAGGAATTCCTCC
AGCCAGTCCCATGCTTGGGAATGCAAGTAATCCTAATAAGGCGGATATTCTGAACGCAAGAAAAGCTCC
ACTGTCCCTAGTAGTAACACAGCATCTGGTGGAATGACACGACGAAATACTTATGTTGCAGTGAGAGAA
CTACAGCTGATAGACTCAGTGATTCAGAATGGCAAAGAAAACAGCACTATTCTGATCAGAGAACTCC
AGTTGCTTCAACACACAGTATCAGTAGTGACGCCACCCAGATCGAATCCGCTTCCCAAGAGGCACTGCC
AGTCGTAGCACTTCCACGGCCAGCCCCGGGAACGGCGAACCGCAACATATAATGGCCCTCCTGCCTCTC
CCAGCCTGTCCCATGAAGCCACACCATTGTCCCAGACTCGAAGCCGAGGCTCCACTAATCTTTTAGTAA
ATTAACCTCAAAAACCTACAAGGAGTCGCAATGTATCTGCTGAGCAAAAAGATGAAAACAAAGAAGCAAAG
CCTCGATCCCTACGCTTACCTGGAGCATGAAAACCACTAGTTCAATGGATCCCGGGGACATGATGCGGG
AAATCCGCAAAGTGTGGACGCCAATAACTGCGACTATGAGCAGAGGGAGCGCTTCTTGCTCTTCTGCGT
CCACGGAGATGGGCACGCGGAGAACCTCGTGCAAGTGGGAAATGGAAGTGTGCAAGCTGCCAAGACTGTCT
CTGAACGGGGTCCGGTTAAGCGGATATCGGGGACATCCATAGCCTTCAAAAATATTGCTTCAAAAATTG
CCAATGAGCTAAAGCTGTAA
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_002376 unedited ACGCCCCTCGAGCAAAGGGCGGTAGGCGCTGTACGGTTGGGAGGTTCTATATAAGCAGAGCTCGTTTAGT GAACCGTCAGAATCTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCCGGGATCTAG ACGGCCGTAGGGGAAGGGAGCCGCCCTCCCCACGGCGCCTTTTCGGAATGCCGTGGACTCGAGGACGC TGGTCGCCGGCCTCCTAGGGCTGTGCTGTTTTGTTTTGACCTCGCATTGTGCAGAAATAAAGTGACGTA AAATGTCCACTAGGACCCATTGCCAACGGTGAATGAACGAGACTGAAAACACACGTCACATGGAGA TGGCGTCAAGAAGTTACCTCTCGTACCAGCCGCTCAGGAGCTCGGTGTAGAAACTCTATAGCCTCCTGT GCAGATGAACAACCTCACATCGGAACACAGACTGTTGAAAACAATCGGCAAAGGAATTTGCAAAGTA AAATTGGCAAGACATATCCTTACAGGCAGAGAGTTGCAATAATGATAATTGACAAAACCTCAGTTGAATC CAACAAGTCTACAAAGCTCTTACAGAGTAGATATGAGATTTAAATCATCCCATATAGTGAAGTTATCGA GTCATTGAACTGAAAAAACACTCTACCTATCATGATATTGCAGTGGAGGTGGAGTTATTTGACTTTTTGT TGCACCATGCAGATGAGGAAAAGAAGCAGATTCTAATTAGAACGATTGTGGTCTTGCAGTCATACTGCAT CAGAACGATCGTAACATCGAGAACCTAGCTGAAATCTATTTGTTAGATGCGATTGAACATAAATAGCGGA TTTCCGGTTAGCATTGATTACTGTGGCGGTAACCTCGCACGTTTTGGGAGTCTTACGCAGCACCTT GGACCTTCAGGCAGAAATATGAACGGCCTATTGAT
Kinase Domain Sequence:	>SC323372 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation AKCTGCAACATCGGCAGGGGATTTGCAAAGTAAAATTGGCAAGACATATCCTTACAGGCAGAGAGGTTG CAATAATGATAATTGACAAAACCTCAGTTGAATCCAACAAGTCTACAAAAGCTCTTCAGAGAAGTAAGAAT AATGAAGATTTTAAATCATCCCAATATAGTGAAGTTATTCGAAGTCATTGAACTGAAAAACACTCTAC CTAATCATGGAATATGCAAGTGGAGGTGAAGTATTTGACTATTTG
Restriction Sites:	Please inquire
ACCN:	NM_002376
Insert Size:	2600 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).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell, 2008 May p536-548.
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_002376.4 , NP_002367.4

RefSeq Size:	3404 bp
RefSeq ORF:	2190 bp
Locus ID:	4140
UniProt ID:	P27448
Cytogenetics:	14q32.32-q32.33
Domains:	UBA, pkinase, TyrKc, KA1, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (3) lacks two alternate in-frame exons compared to variant 1. The resulting isoform (c) has the same N- and C-termini but is shorter compared to isoform a.</p>