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Product datasheet for SC323392

MNK1 (MKNK1) (NM_003684) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MNK1 (MKNK1) (NM_003684) Human Untagged Clone
Tag:	Tag Free
Symbol:	MNK1
Synonyms:	MNK1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_003684, the custom clone sequence may differ by one or more nucleotides

ATGGTATCTTCTCAAAAGTTGGAAAAACCTATAGAGATGGGCAGTAGCGAACCCCTTCCCATCGCAGATG
GTGACAGGAGGAGGAAGAAGAAGCGGAGGGGCCGGGCCACTGACTCCTTGCCAGGAAAGTTTGAAGATAT
GTACAAGCTGACCTCTGAATTGCTTGGAGAGGGAGCCTATGCCAAAGTTCAAGGTGCCGTGAGCCTACAG
AATGGCAAAGAGTATGCCGTCAAAATCATCGAGAAACAAGCAGGGCACAGTCGGAGTAGGGTGTTTCGAG
AGGTGGAGACGCTGTATCAGTGTCAGGGAAACAAGAACATTTTGGAGCTGATTGAGTTCTTTGAAGATGA
CACAAGGTTTTACTTGGTCTTTGAGAAATTGCAAGGAGGTTCCATCTTAGCCCACATCCAGAAGCAAAAG
CACTTCAATGAGCGAGAAGCCAGCCGAGTGGTGCGGGACGTTGCTGCTGCCCTTGACTTCCTGCATACCA
AAGACAAAGTCTCTCTCTGTCACCTAGGCTGGAGTGCTATGGCGCCATCAGGGCTCACTGCAGCCCCAAC
CTCCCTGGGCTCCAGTGATCCTCCCACCTCAGCCTCCCAAGTAGCTGGGACTACAGGCATTGCTCATCGT
GATCTGAAACCAGAAAATATATTGTGTGAATCTCCAGAAAAGGTGTCTCCAGTGAAAATCTGTGACTTTG
ACTTGGGCAGTGGGATGAAACTGAACAACTCCTGTACCCCCATAACCACACCAGAGCTGACCACCCCATG
TGGCTCTGCAGAATACATGGCCCCTGAGGTAGTGGAGGTCTTCACGGACCAGGCCACATTCTACGACAAG
CGCTGTGACCTGTGGAGCCTGGGCGTGGTCCTCTACATCATGCTGAGTGGCTACCCACCCTTCGTGGGTC
ACTGCGGGGCCGACTGTGGCTGGGACCGGGGCGAGGTCTGCAGGGTGTGCCAGAACAAGCTGTTTGAAAG
CATCCAGGAAGGCAAGTATGAGTTTCCTGACAAGGACTGGGCACACATCTCCAGTGAAGCCAAAGACCTC
ATCTCCAAGCTCCTGGTGCGAGATGCAAAGCAGAGACTTAGCGCCGCCCAAGTTCTGCAGCACCCATGGG
TGCAGGGGCAAGCTCCAGAAAAGGGACTCCCCACGCCGCAAGTCCTCCAGAGGAACAGCAGCACAATGGA
CCTGACGCTCTTCGCAGCTGAGGCCATCGCCCTTAACCGCCAGCTATCTCAGCACGAAGAGAACGAACTA
GCAGAGGAGCCAGAGGCACTAGCTGATGGCCTCTGCTCCATGAAGCTTTCCCCTCCCTGCAAGTCACGCC
TGGCCCGGAGACGGGCCCTGGCCCAGGCAGGCCGTGGTGAAGACAGGAGCCCGCCCACAGCACTCTGA

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5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_003684 unedited
CCCGCCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA
ACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCGCGTTCTCGGA
GGAGCGATCTGCAGGTTTCCATGTCAGAGGCCGATGGAGAACTGAAGATTGCCACCTACGCACAAAGGCC
ATTGAGACACTTCGTGTAGCTGGAAGACACCAACTTCCTGACAGGAGCTTTATTTCATTTGGGATTTCAA
GTTTACAGATGGTATCTTCTCAAAAGTTGGAAAAACCTATAGAGATGGGCAGTAGCGAACCCCTTCCCAT
CGCAGATGGTGACAGGAGGAGGAGAAGAAGCGGAGGGGCCGGGCCACTGACTTCCTTGCCCAGGAAAGTT
TGAGATATGTACAAGCTTGACCCTCTGATTGCTTGGAAGAGGGGAGCCCTATGCAAAGTTCAGTTGCGTG
AGCCTCCAGAATGCAAAAATTATGCCGTATGATTATGAAAACCAAGAGGCAAAGTCCGAAGAGGGGTTCA
GAGGTGAAACGCGTTTTCAGGGCCAGGAACCAGAACATTTGGACGTGATGAGTTTTTGAAAGAGACCAGG
TTTACTGTGTCTTGAAAATGCAGAGAGTTCCATTAGCCCATCCAGACAAAGCCTTTATAGACGAGACCCC
ATGTGTCGGACTGTGCGTCCTGATCGGACCAAGCTGCTTGTTCTGAACGAAATTGTGGATCCAAGGTCCG
GAACTGGGATCATGCGCGGTAATGACCCTGACTTAGACGATCATTGTCCTATTGGCCGAGTGAGGTGCGA
CCAAATTGAGGCCTGGT

Kinase Domain Sequence:

>SC323392 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
CSATGARCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGT
CAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCGCGTTCTCGGAGGAGC
GATCTGCAGGTTTCCATGTCAGAGGCCGATGGAGAACTGAAGATTGCCACCTACGCACAAAGGCCATTGA
GACACTTCGTGTAGCTGGAAGACACCAACTTCCTGACAGGAGCTT

Restriction Sites: Please inquire

ACCN: NM_003684

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 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:	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_003684.3, NP_003675.2
RefSeq Size:	2736 bp
RefSeq ORF:	1398 bp
Locus ID:	8569
UniProt ID:	Q9BUB5
Cytogenetics:	1p33
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Insulin signaling pathway, MAPK signaling pathway
Gene Summary:	This gene encodes a Ser/Thr protein kinase that interacts with, and is activated by ERK1 and p38 mitogen-activated protein kinases, and thus may play a role in the response to environmental stress and cytokines. This kinase may also regulate transcription by phosphorylating eIF4E via interaction with the C-terminal region of eIF4G. Alternatively spliced transcript variants have been noted for this gene. [provided by RefSeq, Jan 2012] Transcript Variant: This variant (1) encodes the longest isoform (1). CCDS Note: The coding region has been updated to scale back the N-terminus to one that is more supported by the available transcript data and by conservation across mammals.