

Product datasheet for RC213271

MNK1 (MKNK1) (NM_198973) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MNK1 (MKNK1) (NM_198973) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MNK1
Synonyms:	MNK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213271 representing NM_198973 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**C

ATGGTATCTTCTCAAAGTTGGAAAACTATAGAGATGGGCAGTAGCGAACCCCTTCCCATCGCAGATG
GTGACAGGAGGAGGAAGAAGAAGCGGAGGGGCCGGCCACTGACTCCTTGCCAGGAAAGTTGAAGATAT
GTACAAGCTGACCTCTGAATTGCTTGGAGAGGGAGCCTATGCCAAAGTTCAAGGTGCCGTGAGCCTACAG
AATGGCAAAGAGTATGCCGTCAAATCATCGAGAAACAAGCAGGGCACAGTCGGAGTAGGGTGTTTCGAG
AGGTGGAGACGCTGTATCAGTGTGAGGAAACAAGAACATTTTGGAGCTGATTGAGTTCTTTGAAGATGA
CACAAGGTTTTACTTGGTCTTTGAGAAATTGCAAGGAGGTTCCATCTTAGCCACATCCAGAAGCAAAG
CACTTCAATGAGCGAGAAGCCAGCCGAGTGGTGCAGGACGTTGCTGCTGCCCTTGACTTCTGCATACCA
AAGGCATTGCTCATCGTGATCTGAAACCAGAAAATATATTGTGTGAATCTCCAGAAAAGGTGCTCCAGT
GAAAATCTGTGACTTTGACTTGGGCAGTGGATGAAACTGAACAACCTCTGTACCCCAATAACCACCA
GAGCTGACCACCCCATGTGGCTCTGAGAATACATGGCCCTGAGGTAGTGGAGGTCTTACGGACCAGG
CCACATTCTACGACAAGCGCTGTGACCTGTGGAGCCTGGCGTGGTCTTACATCATGTGAGTGGCTA
CCCACCTTCGTGGTCACTGCGGGGCCGACTGTGGCTGGGACCGGGCGAGGTCTGCAGGTGTGCCAG
AACAAGCTGTTTGAAGCATCCAGGAAGCAAGTATGAGTTTCTGACAAGGACTGGGCACACATCTCCA
GTGAAGCCAAAGACCTCATCTCCAAGCTCCTGGTGCAGATGCAAAGCAGAGACTTAGCGCCGCCAAGT
TCTGCAGACCCATGGGTGCAGGGGAACAGCAGCACAATGGACCTGACGCTCTTCGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC213271 representing NM_198973
Red=Cloning site Green=Tags(s)

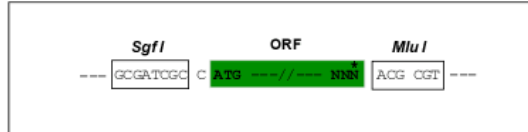
MVSSQKLEKPIEMGSSEPLPIADGDRRRKKRRGRATDSLPGKFEDMYKLTSELLGEGAYAKVQGAVSLQ
 NGKEYAVKIIIEKQAGHSRSRVFREVETLYQCQGNKNIELIEFFEDDTRFYLVFEKLQGGSI LAHIQKQK
 HFNEREASRVVRDVAALDFLHTKGIHRDLKPENILCESPEKVSPVKICDFDLGSGMKLNNSCTPITTP
 ELTTPCGSAEYMAPEVVEVFTDQATFYDKRCDLWSLGVVLYIMLSGYPPFVGHCGADCGWDRGEVCRVCQ
 NKLFEISIQEGKYEFDPKDWAHISSEAKDLISKLLVRDAKQRLSAAQVLQHPWVQGEQQHNGPDALRS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_198973

ORF Size: 1041 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_198973.3](#), [NP_945324.1](#)

RefSeq Size: 1238 bp

RefSeq ORF: 1008 bp

Locus ID: 8569

UniProt ID: [Q9BUB5](#)

Cytogenetics: 1p33

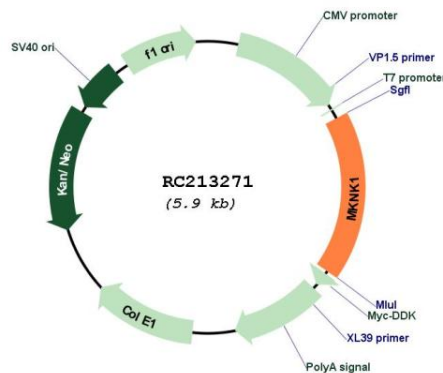
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Insulin signaling pathway, MAPK signaling pathway

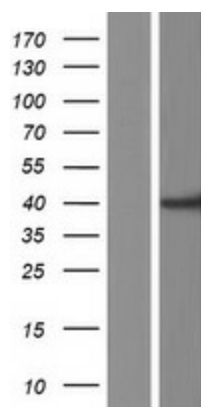
MW: 38.9 kDa

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]

Product images:



Circular map for RC213271



Western blot validation of overexpression lysate (Cat# [LY404698]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213271 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).