

Product datasheet for **RC201149**

MNK1 (MKNK1) (NM_003684) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MNK1 (MKNK1) (NM_003684) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC201149 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTATCTTCTCAAAGTTGAAAAACCTATAGAGATGGGCAGTAGCGAACCCCTCCCATCGCAGATG
 GTGACAGGAGGAAAGAAGAAGCGGAGGGCCGGCCACTGACTCCTTGCCAGGAAAGTTTGAAGATAT
 GTACAAGCTGACCTCTGAATTGCTTGGAGAGGGAGCCTATGCCAAAGTTCAAGGTGCCGTGAGCCTACAG
 AATGGCAAAGAGTATGCCGTCAAATCATCGAGAAACAAGCAGGGCACAGTCGGAGTAGGGTGTTCGAG
 AGGTGGAGACGCTGTATCAGTGTGAGGAAACAAGAACATTTTGGAGCTGATTGAGTTCTTTGAAGATGA
 CACAAGTTTTACTTGGTCTTTGAGAAATTGCAAGGAGTTCCATCTTAGCCACATCCAGAAGCAAAG
 CACTTCAATGAGCGAGAAGCCAGCCGAGTGGTGCAGGACGTTGCTGCTGCCCTTGACTTCCTGCATACCA
 AAGACAAAGTCTCTCTGTACCTAGGCTGGAGTGTATGGCGCCATCAGGGCTACTGCAGCCCCAAC
 CTCCTGGGCTCCAGTGATCCTCCACCTCAGCCTCCCAAGTAGCTGGGACTACAGGCATTGCTCATCGT
 GATCTGAAACCAGAAAATATATTGTGTGAATCTCCAGAAAAGGTGCTCCAGTAAAAATCTGTGACTTTG
 ACTTGGGCAGTGGGATGAACTGAACAACCTCTGTACCCCAATAACCACACCAGAGCTGACCACCCCATG
 TGGCTCTGCAGAAATACATGGCCCTGAGGTAGTGGAGGTCTTACGGACCAGGCCACATTCTACGACAAG
 CGCTGTGACCTGTGGAGCCTGGGCGTGGTCTCTACATCATGCTGAGTGGCTACCCACCTTCGTGGGTC
 ACTGCGGGGCCGACTGTGGCTGGGACCGGGGCGAGGTCTGCAGGGTGTGCCAGAACAAAGCTGTTGAAAG
 CATCCAGGAAGGCAAGTATGAGTTTCTGACAAGGACTGGGCACACATCTCCAGTGAAGCCAAAGACCTC
 ATCTCAAAGCTCCTGGTGCAGATGCAAAGCAGAGACTTAGCGCCGCCAAGTTCTGCAGCACCCATGGG
 TGCAGGGCAAGCTCCAGAAAAGGACTCCCCAGCCCAAGTCTCCAGAGGAACAGCAGCAATGGA
 CCTGACGCTCTTCGAGCTGAGGCCATCGCCCTTAACCGCCAGCTATCTCAGCACGAAGAGAACGAACTA
 GCAGAGGAGCCAGAGGCACTAGCTGATGGCCTCTGCTCCATGAAGCTTTCCCTCCTGCAAGTACGCC
 TGGCCCGAGACGGGCCCTGGCCAGGCAGGCCGTGGTGAAGACAGGAGCCGCCACAGCACTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201149 protein sequence
 Red=Cloning site Green=Tags(s)

MVSSQKLEKPIEMGSSEPLPIADGDRRRKKRRRGRATDSLPGKFEDMYKLTSELLGEGAYAKVQGAVSLQ
 NGKEYAVKIIIEKQAGHSRVRVREVETLYQCQGNKNIELIEFFEDDTRFYLVFEKLQGGSI LAHIQKQK
 HFNEREASRVVRDVAALDFLHTKDKVSLCHLGSAMAPSGLTAAPTSLGSSDPPTSASQVAGTTGIAHR
 DLKPENILCESPEKVPVKICDFDLGSGMKLNNSCTPIITPELTTPCGSAEYMAPEVVEVFTDQATFYDK
 RCDLWSLGVVLYIMLSGYPPFVGHCGADCGWDRGEVCRVCQNKLFESI QEGKYEFDPKDWAHISSEAKDL
 ISKLLVRDAKQRLSAAQVLQHPWVQQAPEKGLPTPQVLQRNSSTMDLTLFAAEAIALNRQLSQHEENEL
 AEEPEALADGLCSMKLSPPCKSRLARRRALAQAGRGEDRSPTAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6206_f01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003684

ORF Size: 1395 bp

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](#)

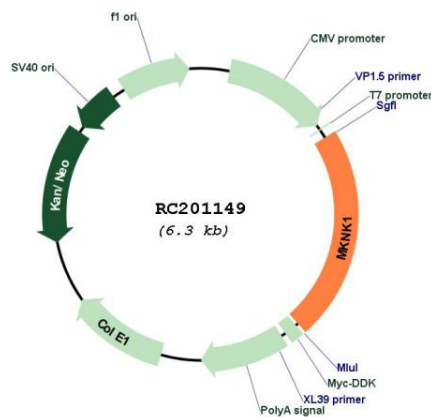
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

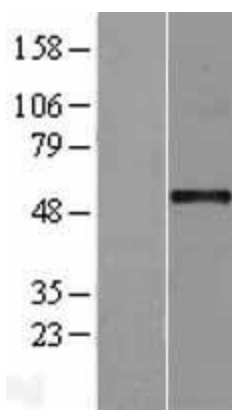
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_003684.5
RefSeq Size:	2827 bp
RefSeq ORF:	1362 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
MW:	51.3 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]

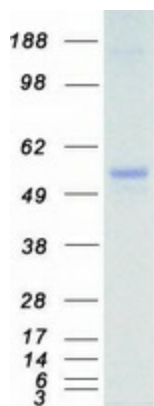
Product images:



Circular map for RC201149



Western blot validation of overexpression lysate (Cat# [LY418502]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201149 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MNK1 protein (Cat# [TP301149]). The protein was produced from HEK293T cells transfected with MNK1 cDNA clone (Cat# RC201149) using MegaTran 2.0 (Cat# [TT210002]).