

Product datasheet for **RN204301**

Mknk2 (NM_001011985) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mknk2 (NM_001011985) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Mknk2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN204301 representing NM_001011985 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGCAGAAGAGAACAGCCGAACCTTCAGGGCTCCACCCTTCGTTCAAGGGGCAGAATCCTTTTCGAGT
TGGCCTTACCTTAGACCCCGCCAGCACGGGGACTCTGACTTCAGCCCGCAGTGTGAAGCCCGACCTGA
CATGCCCTCCAGTCAGCCCATCGACATCCAGACGCCAAGAAGAGAGGGCCGCAAAAAGAAGCGCTGTCGG
GCTACTGACAGCTTCTCAGGCAGATTTGAAGATGTCTACCAGCTGCAGGAGGATGTGCTGGGGGAAGGGG
CCCATGCCCGTGTGCAGACCTGTGTCAATCTCATACCAACCAGGAATATGCTGTCAAGATCATTGAGAA
GCAGCTGGCCATATCCGCAGCAGGGTGTCCGGGAGGTGGAGATGCTGTACCAGTGCCAGGGACATAGG
AATGTTCTAGAAGTATTGAGTTCTTTGAGGAGGAGACCCTTCTACCTGGTGTGGAAAAGATGCGTG
GTGGATCCATCCTGAGCCACATCCACAGAAGGCGCCACTTAAATGAACTGGAGGCCAGCGTGGTGTACA
GGATGTGGCCAGTGCCCTGGACTTCTGCATAACAAAGGCATCGCCACAGGGACCTAAAGCCAGAGAAC
ATCCTGTGTGAGCACCCCAACCAGGTCTCGCCAGTGAAGATCTGTGACTTCGATCTTGGCAGTGGCATT
AACTCAACGGAGACTGCTCCCCATCTCCAGCCAGAGCTGCTCACCCCGTGTGGGTCTGGGGAGTACAT
GGCACCCGAGGTGGTGAAGCCTTTAGTGAGGAGGCCAGCATCTATGACAAGCGCTGCGACTGTGGAGC
CTGGGTGTATCCTGTACATCCTGCTCAGTGGCTACCCGCCCTTCGTAGGCCACTGTGGCAGCGACTGTG
GCTGGGACCGCGGGGAGGCTGCCTGCCTGCCAGAACATGCTGTTTGGAGAGCATCCAGGAAGGGAAGTA
CGAGTTCCCGACAAGGACTGGTCCCACATCTCCTTCGCTGCCAAAGACCTCATCTCCAAGCTGTGGTG
CGAGATGCCAAGCAGAGGCTGAGCGTGCCCAAGTTCTGCAGCACCCCTGGGTGCAGGGGTGTGCTCCAG
AGAACACCTTACCAACACCCTTGGTTCTGCAGAGGAACAGCTGTGCCAAAGACCTCACGTCTTTGCAGC
TGAGGCCATCGCCATGAACCGGCAGCTGGCCAGTGTGAGGAGGACGCTGGCCAGGACCAGCCTGTGCTC
ATCCGAGCTACCTCAGCTGCCTGCAGTTGTCCCGCCCTCCAGTCCAAGCTGGCCAGAGGCGCCAGA
GGCCAGCCTGTGGCCACCCTGTGGTCTCGTAGGGGATCGCGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001011985
Insert Size:	1380 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:	<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:	<u>NM_001011985.1</u> , <u>NP_001011985.1</u>
RefSeq Size:	3458 bp
RefSeq ORF:	1380 bp
Locus ID:	299618
UniProt ID:	<u>Q5U2N4</u>
Cytogenetics:	7q11
Gene Summary:	Serine/threonine-protein kinase that phosphorylates SFPQ/PSF, HNRNPA1 and EIF4E. May play a role in the response to environmental stress and cytokines. Appears to regulate translation by phosphorylating EIF4E, thus increasing the affinity of this protein for the 7-methylguanosine-containing mRNA cap. Required for mediating PP2A-inhibition-induced EIF4E phosphorylation. Triggers EIF4E shuttling from cytoplasm to nucleus. Enhances the formation of EIF4F complex in pachytene spermatocytes, thus promoting mRNA translation during spermatogenesis. Displays a high basal kinase activity. Acts as a mediator of the suppressive effects of IFNgamma on hematopoiesis. Negative regulator for signals that control generation of arsenic trioxide As(2)O(3)-dependent apoptosis and anti-leukemic responses. Involved in anti-apoptotic signaling in response to serum withdrawal (By similarity).[UniProtKB/Swiss-Prot Function]