

Product datasheet for **MR210573**

Rps6ka4 (NM_019924) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rps6ka4 (NM_019924) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rps6ka4
Synonyms:	90kDa; 1110069D02Rik; AI848992; mMSK2; Msk2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR210573 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGAGACGAGGATGAGGACGAGGGCTGCGCCGTGGAGCTGCAGATCACCGAAGCCAACCTCACCGGGC
 ATGAGGAGAAGGTGAGCGTGGAGAACTTCGCGCTGCTCAAGGTGCTGGGCACGGGAGCCTATGGGAAGGT
 GTTCTGGTGCAGGAAAGACGGGTGGGCACGACGCGGCAAGCTCTATGCCATGAAGGTGCTACGCAAGGCG
 GCGTTGGTGCAGCGCGCAAGACACAGGAGCATACCCGCACCGAACGCTCGGTGCTGGAGCTGGTTCCGCC
 AAGCACCTTCTGGTCACTGCACTACGCTTCCAGACGGATGCCAAGCTGCACCTCATCTGGACTA
 CGTGAGCGGTGGTGGAGATGTTCACTCACCTTACCAGCGCCAGTACTTCAAGGAGGCTGAGGTTGAGTG
 TATGGGGGAGAGATTGCTGGCCCTGGAACACCTGCACAAGCTGGGTATCATCTACCGGACCTGAAGC
 TGGAGAAGCTTACTTGACTCAGAAGGTCACATCGTCTTACAGACTTTGGGCTGAGCAAGGAGTTCCT
 GACGGAGGAGAAAGAGCGGACCTTCTCTTCTGTGGCACAATCGAGTACATGGCTCCCGAAATCATCCGA
 AGCAAGGCTGGACATGGCAAGGCTGTGGACTGGTGGAGCCTGGGTATCCTGCTCTTCGAGCTGCTGACAG
 GAGCCTCACCTTTCACACTGGAGGGAGAGGAACACTCAGGCTGAGGTGTCCCGACGGATCTTGAAGTG
 CTCCCCTCCCTTCCCTCTCCGGATTGGGCTGTGGCACAGGACCTGCTACAGCGGCTGCTGTGCAAGGAC
 CCTAAGAAGAGGTTGGGCGCAGGTCCCCAGGGTGGCAGGAAGTCAAGAGTACCCCTTCTTCCAGGGTC
 TGGACTGGGTGGCTGTGGCTGCCAGAAAGATCCAGCCCCATTCCGGCCCCAGATCCGCTCAGAGCTGGA
 TGTGGGAATTTTGGGAGGAATTCACCCGGCTGGAGCCCGTCTACCCCTGCGGCGAGCCCTCCACCT
 GGGGACCTCGGATCTTTCAGGGATACTCTTCTGGTCCGTCATCTTGGACCACAACAATGCAG
 TGATGGCTGATGTACTGCAGGCACCCGGTGTGGATACAGGCCGGGAGGCGAGGTCAGGAGGAGTGC
 CATGATGCAGGACTCGCCTTTCTTCCAGCAGTACGAACTGGACCTTCGGGAACCGAGCACTGGGGCAGGGC
 AGCTTCTCTGTGTGTCGAGATGTGCGCAGCGCCAGAGCGGCCAGGAGTTTGTGTCAAGATCCTCAGCC
 GCAGGCTGGAGGAGAACACTCAGAGAGAGGTGGCTGCTCTTCCGCTGTGCCAGTACACCCCAACGTGGT
 GAATCTGCATGAGGTGCTTCATGACCAGCTACACACTTACCTGGTCTGGAGTTGCTGCGAGGCGGAGAG
 CTATTGGAACACATCCGCAAGAAGCGGCTTTCAGCGAGTCCGAGGCCAGCCAGATCCTTCGGAGCCTGG
 TTTCCGGCCGTGAGCTTATGCACGAGGAGGCGAGGCGTGGTGCACCCGACCTGAAACCCGAGAACATCTT
 GTACGCGGACGACTCCCGGGGCCCGGTGAAGATCATCGACTTCGGGTTGCGCGACTGCGGCCCCAG
 AGCCCGCAGAGCCCATGCAGACTCCTTGCTTTCACACTGCAGTACGCTGCACCCGAGCTGCTGGCACAGC
 AGGGCTACGATGAGTCTGCGATCTATGGAGCCTGGGTGTCATTCTGTACATGATGCTGTCTGGCCAGGT
 TCCCTTCAAGGGGCTCGGGCCAGGGTGGACAGAGTCAAGGACGCTGAGATCATGTGCAAGATCCGTGAA
 GGGCGCTTCTCCCTGGACGGGAAGCCTGGCAAGGTGTGTGCGAGGAAGCCAAGGAGCTGGTCCGAGGGC
 TACTGACAGTGCACCCCGCAAGCGGCTGAAGCTGGAGGGGCTGCGTAGCAGCTCGTGGCTTTCAGGACGG
 CAGCGCGCTCCTCGCCCCGCTCCGCACGCCGATGTGCTGGAGTCTCTGGGCCAGCTGTGCGTTCC
 GGGCTCAATGCCACTTTCATGGCGTTCAACCGAGGCAAGCGCGAGGGCTTCTTCTCAAGAGTGTAGAGA
 ATGGCCCTCTGGCAAGAGGCGCAAGCAGAAGTCCGGAGCGCCGCCCTCCCGTCCGGCTCCCCAGT
 GCCTGCCTCCTCGGTGCGCTACCAGCCTTCCGCTAAGGGGACAACCTCGCCGAGCCAACGGCCCTTGT
 TCCCCCTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210573 protein sequence

Red=Cloning site Green=Tags(s)

MGDEDEDEGCVELQITEANLTGHEEKVSVENFALLKVLGTGAYGKVFLVRKTGGHDAGKLYAMKVLRKA
ALVQRAKTQEHTRTERSVELEVRQAPFLVTLHYAFQTDAKLHLILDYVSGGEMFTHLYQRQYFKEAEVRV
YGG EIVL ALEHLHKLGI IYRDLKLENVLLDSEGHIVL TDFGLSKEFLTEEKERTFSFCGTIEYMAPEIIR
SKAGHGKAVDWWSL GILLFELLTGASPF TLEGERNTQAEVSRRIKCSPPFPLRIGPVAQDLLQRLLCKD
PKKRLGAGPQGAQEVKSHPF FQGLDWVALAARKIPAPFRPQIRSELDVGNFAEEFTRLEPVYPPAGSPPP
GDPRIFQGYSFVAPSILFDHNNAMADV LQAPGAGYRPGRAAVARSAMMQDSPFFQYELDLREPALGQG
SFSVCRRCRQRQSGQEF AVKILSRRLEENTQREVAALRLCQSHPNVNLHEVLHDQLHTYL VLELLRGGE
LLEHIRKKRLFSESEASQILRSLVSAVFMHEEAGVVHRDLKPENILYADDTPGAPVKIIDFGFARLRPQ
SPAEMPQTFCFTLQYAAPELLAQGYDESCDLWSLGVILYMLSGQVPPFQGASGQGGQSAAEIMCKIRE
GRFSLDGEAWQGVSEEAKEKLVRLTVDPAKRLKLEGLRSSWLQDGSARSSPPLRTPDVLESSGPAVRS
GLNATFMAFNRGKREGFFLKSVENAPLAKRRKQKLRSAASRRGSPVPASSGRLPASAAKGTTRRANGPL
SPS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_019924

ORF Size: 2322 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_019924.1](#), [NM_019924.2](#), [NP_064308.1](#)

RefSeq Size: 3152 bp

RefSeq ORF: 2322 bp

Locus ID: 56613

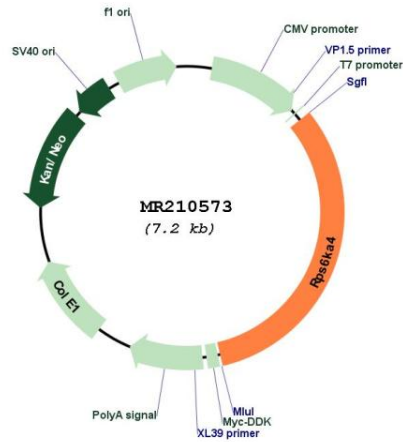
UniProt ID: [Q9Z2B9](#)

Cytogenetics: 19 A

MW: 85.7 kDa

Gene Summary: Serine/threonine-protein kinase that is required for the mitogen or stress-induced phosphorylation of the transcription factors CREB1 and ATF1 and for the regulation of the transcription factor RELA, and that contributes to gene activation by histone phosphorylation and functions in the regulation of inflammatory genes. Phosphorylates CREB1 and ATF1 in response to mitogenic or stress stimuli such as UV-C irradiation, epidermal growth factor (EGF) and anisomycin. Plays an essential role in the control of RELA transcriptional activity in response to TNF. Phosphorylates 'Ser-10' of histone H3 in response to mitogenics, stress stimuli and EGF, which results in the transcriptional activation of several immediate early genes, including proto-oncogenes c-fos/FOS and c-jun/JUN. May also phosphorylate 'Ser-28' of histone H3. Mediates the mitogen- and stress-induced phosphorylation of high mobility group protein 1 (HMG1/HMG14). In lipopolysaccharide-stimulated primary macrophages, acts downstream of the Toll-like receptor TLR4 to limit the production of pro-inflammatory cytokines. Functions probably by inducing transcription of the MAP kinase phosphatase DUSP1 and the anti-inflammatory cytokine interleukin 10 (IL10), via CREB1 and ATF1 transcription factors (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210573