

Product datasheet for RC200606

SAPK4 (MAPK13) (NM_002754) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAPK4 (MAPK13) (NM_002754) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SAPK4
Synonyms:	MAPK-13; MAPK 13; p38delta; PRKM13; SAPK4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200606 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCCTCATCCGAAAAAGGGCTTCTACAAGCAGGACGTCAACAAGACCGCCTGGGAGCTGCCAAGA
CCTACGTGTCCCCGACGCACGTCCGGCAGCGGGCCTATGGCTCCGTGTGCTCGGCCATCGACAAGCGGTC
AGGGGAGAAGGTGGCCATCAAGAAGCTGAGCCGACCCTTCAGTCCGAGATCTTCGCCAAGCGGCCTAC
CGGGAGCTGCTGCTGCTGAAGCACATGCAGCATGAGAACGTCATTGGGCTCCTGGATGTCTTACCCAG
CCTCCTCCCTGCGCAACTTCTATGACTTCTACCTGGTGTGCCCTTCATGCAGACGGATCTGCAGAAGAT
CATGGGGATGGAGTTCAGTGAGGAGAAGATCCAGTACCTGGTGTATCAGATGCTCAAAGGCCTTAAGTAC
ATCCACTCTGCTGGGGTCTGTCACAGGGACCTGAAGCCAGGCAACCTGGCTGTGAATGAGGACTGTGAAC
TGAAGATTCTGGATTTTGGGCTGGCGGACATGCAGACGCCGAGATGACTGGCTACGTGGTGACCCGCTG
GTACCGAGCCCCGAGGTGATCCTCAGCTGGATGCACTACAACCAGACAGTGGACATCTGGTCTGTGGGC
TGATCATGGCAGAGATGCTGACAGGAAAACTCTGTTCAAGGGGAAAGATTACCTGGACCAGCTGACCC
AGATCCTGAAAGTGACCGGGTGCCTGGCACGGAGTTTGTGCAGAAGCTGAACGACAAAGCGCCAAATC
CTACATCCAGTCCCTGCCACAGACCCCCAGGAAGGATTTCACTCAGCTGTTCCCACGGCCAGCCCCAG
GCTGCGGACCTGCTGGAGAAGATGCTGGAGCTAGACGTGGACAAGCGCCTGACGGCCGCGCAGGCCCTCA
CCATCCCTTCTTTGAACCCTTCCGGGACCCTGAGGAAGAGACGGAGGCCAGCAGCCGTTTGATGATTC
CTTAGAACACGAGAACTCACAGTGGATGAATGGAAGCAGCACATCTACAAGGAGATTGTGAACTTCAGC
CCCATTGCCCGAAGGACTCACGGCGCCGAGTGGCATGAAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC200606 protein sequence
Red=Cloning site Green=Tags(s)

MSLIRKKGfYKQDVNKTAWELPKTYVSPTHVGSgAYGSVCSAIDKRSgEKVAIKKLSRPFQSEIFAKRAY
 RELLLLKHMQHENVIgLLDVFTPASSLRNFYDFYLVMpFMQDLQKIMgMEFSEEKIQYL VYQMLKGLKY
 IHSAGVVHRDLKPGNLAVNEDCELKILDFGLARHADAEMTYVVTRWYRAPEVILSWMHYNQTVDIWSVG
 CIMAEMLTGKTLFKGKDYLDQLTQILKVTGVPgTEFVQKLNDKAAKSYIQSLPQTPrKDFTLQFPRASPO
 AADLLEKMLELDVDKRLTAAQALThPPFFeFRDPEEETAQQPFDSDLEHEKLTVDewKQHIYKEIVNFS
 PIARKDSRRRSGMKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6092_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002754

ORF Size: 1095 bp

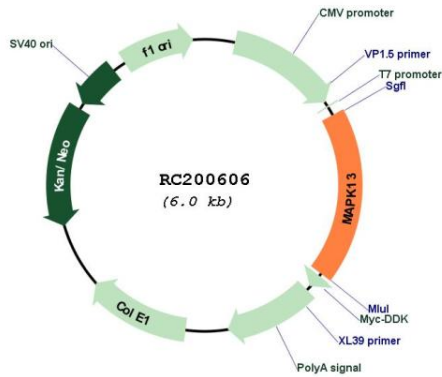
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

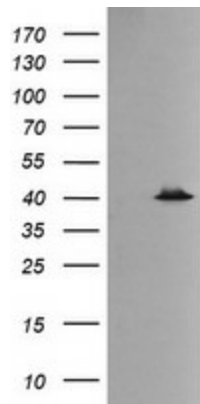
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_002754.3 , NP_002745.1
RefSeq Size:	6348 bp
RefSeq ORF:	1098 bp
Locus ID:	5603
UniProt ID:	O15264
Cytogenetics:	6p21.31
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Amyotrophic lateral sclerosis (ALS), Epithelial cell signaling in Helicobacter pylori infection, Fc epsilon RI signaling pathway, GnRH signaling pathway, Leukocyte transendothelial migration, MAPK signaling pathway, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Progesterone-mediated oocyte maturation, RIG-I-like receptor signaling pathway, T cell receptor signaling pathway, Toll-like receptor signaling pathway, VEGF signaling pathway
MW:	42.1 kDa
Gene Summary:	This gene encodes a member of the mitogen-activated protein (MAP) kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The encoded protein is a p38 MAP kinase and is activated by proinflammatory cytokines and cellular stress. Substrates of the encoded protein include the transcription factor ATF2 and the microtubule dynamics regulator stathmin. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Jul 2012]

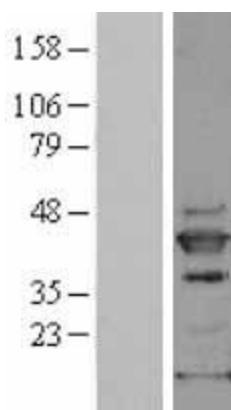
Product images:



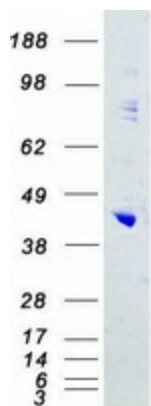
Circular map for RC200606



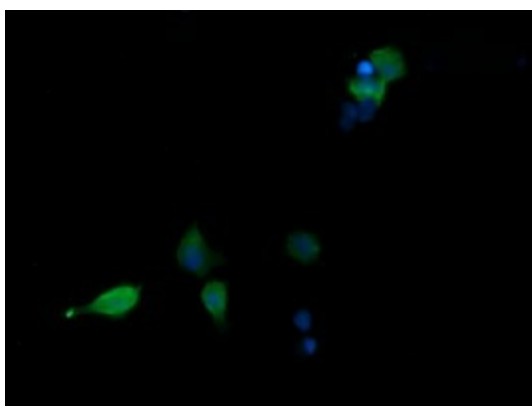
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MAPK13 (Cat# RC200606, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK13 (Cat# [TA505878]). Positive lysates [LY400973] (100ug) and [LC400973] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400973]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200606 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAPK13 protein (Cat# [TP300606]). The protein was produced from HEK293T cells transfected with MAPK13 cDNA clone (Cat# RC200606) using MegaTran 2.0 (Cat# [TT210002]).



Anti-MAPK13 mouse monoclonal antibody ([TA505878]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MAPK13 (RC200606).