

Product datasheet for **RC213716**

p38 (MAPK14) (NM_139013) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p38 (MAPK14) (NM_139013) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	p38
Synonyms:	CSBP; CSBP1; CSBP2; CSPB1; EXIP; Mxi2; p38; p38ALPHA; PRKM14; PRKM15; RK; SAPK2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>>RC213716 representing NM_139013</p> <p>Red=Cloning site Blue=ORF Green=Tags(s)</p>

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCTCAGGAGAGGCCACGTTCTACCGCAGGAGCTGAACAAGACAATCTGGGAGGTGCCGAGCGTT
 ACCAGAACCTGTCTCCAGTGGGCTCTGGCGCCTATGGCTCTGTGTGTGCTGCTTTTGACACAAAACGGG
 GTTACGTGTGGCAGTGAAGAAGCTCTCCAGACCATTTTCAGTCCATCATTATGCGAAAAGAACCTACAGA
 GAACTGCGGTTACTTAAACATATGAAACATGAAAATGTGATTGGTCTGTTGGACGTTTTTACACCTGCAA
 GGTCTCTGGAGGAATTCAATGATGTGTATCTGGTGACCCATCTCATGGGGCAGATCTGAACAACATTGT
 GAAATGTCAGAAAGCTTACAGATGACCATGTTTCAGTTCTTATCTACCAAATCTCCGAGGTCTAAAGTAT
 ATACATTCAGCTGACATAATTACAGGGACCTAAAACCTAGTAATCTAGCTGTGAATGAAGACTGTGAGC
 TGAAGATTCTGGATTTTGGACTGGCTCGGCACACAGATGATGAAATGACAGGCTACGTGGCCACTAGGTG
 GTACAGGGCTCCTGAGATCATGCTGAACTGGATGCATTACAACCAGACAGTTGATATTTGGTCAGTGGGA
 TGCATAATGGCCGAGCTGTTGACTGGAAGAACATTGTTTCCTGGTACAGACCATTGATCAGTTGAAGC
 TCATTTTAAGACTCGTTGGAACCCAGGGGCTGAGCTTTTGAAGAAAATCTCCTCAGAGTCTGCAAGAAA
 CTATATTCAGTCTTTGACTCAGATGCCGAAGATGAACCTTGCGAATGTATTATTGGTGCCAATCCCTG
 GGTAAGTTGACCATATATCCTCACCTCATGGATATTGAATTGTTATGATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

Protein Sequence: >RC213716 representing NM_139013
 Red=Cloning site Green=Tags(s)

MSQERPTFYRQELNKTIEWEPERYQNLSPVGSGAYGSVCAAFDTKTGLRVAVKKLSRPFQSIHAKRTYR
 ELRLKHKHENVIGLLDVFTPARSLEEFNDVYLVTHLMGADLNNIVKCQKLTDHVVQLIYQILRGLKY
 IHSADIIHRDLKPSNLAVNEDCEKILDFGLARHTDDEMTGYVATRWYRAPEIMLNWMHYNQTVDIWSVG
 CIMAELLTGRTLFPGTDHIDQLKLILRLVGTPGAELLKKISSESARNYIQSLTQMPKMNFANVFIGNPL
 GKLTIIYPHLMDIELVMI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8050_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_139013

ORF Size: 891 bp

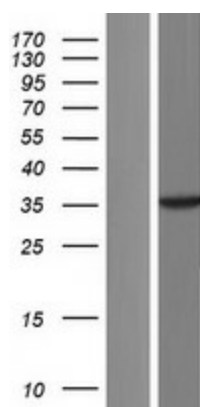
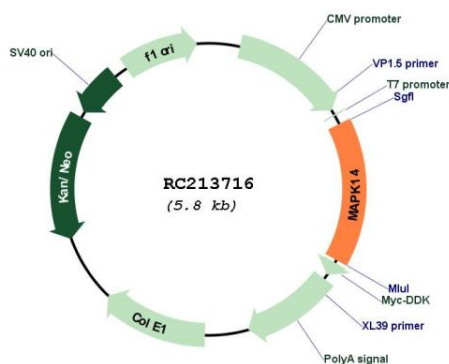
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_139013.3</u>
RefSeq Size:	1312 bp
RefSeq ORF:	894 bp
Locus ID:	1432
UniProt ID:	<u>Q16539</u>
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:	33.9 kDa
Gene Summary:	<p>The protein encoded by this gene is a member of the 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. This kinase is activated by various environmental stresses and proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]</p>

Product images:



Western blot validation of overexpression lysate (Cat# [LY408440]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213716 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).