

Product datasheet for **SC124170**

p38 (MAPK14) (NM_139014) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p38 (MAPK14) (NM_139014) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAPK14
Synonyms:	CSBP; CSBP1; CSBP2; CSPB1; EXIP; Mxi2; p38; p38ALPHA; PRKM14; PRKM15; RK; SAPK2A
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_139014, the custom clone sequence may differ by one or more nucleotides

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ATGTCTCAGGAGAGGCCACGTTCTACCGGCAGGAGCTGAACAAGACAATCTGGGAGGTGCCGAGCGTT
ACCAGAACCTGTCTCCAGTGGGCTCTGGCGCCTATGGCTCTGTGTGTGCTGCTTTTGACACAAAAACGGG
GTTACGTGTGGCAGTGAAGAAGCTCTCCAGACATTTTCAGTCCATCATTTCATGCGAAAAGAACCTACAGA
GAACTGCGGTTACTTAAACATATGAAACATGAAAATGTGATTGGTCTGTTGGACGTTTTTACACCTGCAA
GGTCTCTGGAGGAATTAATGATGTGTATCTGGTGACCCATCTCATGGGGGCAGATCTGAACAACATTGT
GAAATGTCAGAAGCTTACAGATGACCATGTTTCAGTTCCTTATCTACCAAATTCCTCCGAGGTCTAAAGTAT
ATACATTCAGCTGACATAATTCACAGGGACCTAAAACCTAGTAATCTAGCTGTGAATGAAGACTGTGAGC
TGAAGATTCTGGATTTTGGACTGGCTCGGCACACAGATGATGAAATGACAGGCTACGTGGCCACTAGGTG
GTACAGGGCTCCTGAGATCATGCTGAACTGGATGCATTACAACCAGACAGTTGATATTTGGTCAGTGGGA
TGCATAATGGCCGAGCTGTTGACTGGAAGAACATTGTTTCTGGTACAGACCATATTGATCAGTTGAAGC
TCATTTTAAAGACTCGTTGGAACCCAGGGGCTGAGCTTTTGAAGAAAATCTCCTCAGAGTCTCTGTGCAG
TTGCTGGAGAAGATGCTTGTATTGGACTCAGATAAGAGAATTACAGCGGCCCAAGCCCTTGACATGCCT
ACTTTGCTCAGTACCACGATCCTGATGATGAACCAGTGCCGATCCTTATGATCAGTCCTTTGAAAGCAG
GGACCTCCTTATAG
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_139014 unedited
 TAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGNAGGNGTGCGGGTGCA
 GGCGGGNGGCCCCACAGGGCCACCTTCTTGCCCGCGGCTGCCGTGGAAAATGTCTCAG
 GAGAGGCCACGTTCTACCGGCAGGAGCTGAACAAGACAATCTGGGAGGTGCCCGAGCGT
 TACCAGAACCTGTCTCCAGTGGGCTCTGGCGCCTATGGCTCTGTGTGTCTGCTTTTGAC
 ACAAAAACGGGGTTACGTGTGGCAGTGAAGAAGCTCCTCAGACCATTTCAGTCCATCATT
 CATGCGAAAAGAACCTACAGAGAAGCTGCGGTTACTTAAACATATGAAACATGAAAATGTG
 ATTGGTCTGTTGGACGTTTTTACACCTGCAAGGTCTCTGGAGGAATTCATGATGTGTAT
 CTGGTGACCCATCTCATGGGGCAGATCTGAACAACATTGTGAAATGTCAGAAGCTTACA
 GATGACCATGTTCAAGTTCCTTATCTACCAAATTCTCCGAGGTCTAAAGTATATACATTCA
 GCTGACATAATTCACAGGGACCTAAAACCTAGTAATCTAGCTGTGAATGAAGACTGTGAG
 CTGAAGATTCTGGATTTTGGACTGGCTCGGCACACAGATGATGAAATGACAGGCTACGTG
 GCCACTAGGTGGTACAGGGCTCCTGAGATCATGCTGAACTGGATGCATTACAACCAGACA
 GTTGATATTTGGTCAGTGGGATGCATAATGGCCGAGCTGTTGACTGAAAAGACATTGTTT
 CCTGGTACAGACCATATTAACCAGCTTCAGCAGATTATGCGTCTGACAGGAACACCCNCC
 GCTTATCTCATNACAGATGCCNAGCCATGAGGGCAGAACTATATTCATNCTTTGACTC
 AGATGCGAANATAACTTTGCGATGTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_139014 unedited
 GCCTTTGGGCGATGCGCAACTTNCAGGNCCAGNATAGCACTGGGGAAGGGTCACAGGGC
 TGCCACCCGGGTACTGCTTCAGGAAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGA
 GTTTTTTTTTTTTTTTTTGTTCTCATAAACTTTATTTATGGATACTGGAATTTAAGTT
 TTACATTACTTACATCACATGCTACAAAATCTACTACTCTTTTTTTTTTTCTTCCCAAC
 CATTTAAAAATGTAAAAGCCATTCTTAGCAAGCTACACCAAACAGGTGGTGGCCAGATT
 TGGCCCTCAAGCCACAGTCTGCTGAGCCCTGTCATTTCCGCCACTTTACTACTCGAGTGT
 AGATAAGACAGGCCCAATGCTTAATACTTCGTTCAATTTGCTCTTTGCTTTACCCATCCA
 CAGCAAAGACCTGGATACTCTTACCAAAAAATGTACAACCTAAGAAGCTTTATCAACATT
 TTCTAAATGTTAGGAGTAGTATTAAGATCTGTCAGACAAGTATGCCAGGTCACAGTTAA
 AGGATATTGATATAATGCCATATTGTGCATTAATAAAAAACAAGAGAAAAATATAATAAA
 CTTGAGAACTCACTAAATTTGAAAAATAGGCTTTATTTTAAACAGTGGTATTGTCTGAC
 ATCCTATACGGCATAACTGATTACAGCCAAGTTCATGAATACAAATAAAATAGCAATTTT
 CCTCATTCTCTTTTTGTTTTCTGTTTCAGAAAATCATGATATGGGAGCATTATGCTCAGA
 AACCGAAGAGCTCTTCCAAGAGCTACAGCTTATAGTCCCAGCTTNCAGAGCATGCAGCCT
 CCTACACGTATGTGGTCACATGTGCAAAGACTTTATTACAAATATTCAGAGCAGTATTTT
 TGTAAGAAATCACACGAGCATTTACACCAATCTGGCTGATAAA

Restriction Sites:

NotI-NotI

ACCN:

NM_139014

Insert Size:

4700 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:

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_139014.1](#), [NP_620583.1](#)

RefSeq Size: 3679 bp

RefSeq ORF: 924 bp

Locus ID: 1432

UniProt ID: [Q16539](#)

Cytogenetics: 6p21.31

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

Gene Summary: 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]
Transcript Variant: This variant (4) contains a different internal segment when compared to variant 1. It thus encodes an isoform that has a different and shorter internal segment, as compared to isoform 1.