OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC323402

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:	p38
Synonyms:	CSBP; CSBP1; CSBP2; CSPB1; EXIP; Mxi2; p38; p38ALPHA; PRKM14; PRKM15; RK; SAPK2A
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_139014, the custom clone sequence may differ by one or more nucleotides

ATGTCTCAGGAGAGGCCCACGTTCTACCGGCAGGAGCTGAACAAGACAATCTGGGAGGTGCCCGAGCGTT
ACCAGAACCTGTCTCCAGTGGGCTCTGGCGCCTATGGCTCTGTGTGTGCTGCTTTTGACACAAAAACGGG
GTTACGTGTGGCAGTGAAGAAGCTCTCCAGACCATTTCAGTCCATCATTCATGCGAAAAGAACCTACAGA
GAACTGCGGTTACTTAAACATATGAAACATGAAAATGTGATTGGTCTGTTGGACGTTTTTACACCTGCAA
GGTCTCTGGAGGAATTCAATGATGTGTATCTGGTGACCCATCTCATGGGGGCAGATCTGAACAACATTGT
GAAATGTCAGAAGCTTACAGATGACCATGTTCAGTTCCTTATCTACCAAATTCTCCGAGGTCTAAAGTAT
ATACATTCAGCTGACATAATTCACAGGGACCTAAAACCTAGTAATCTAGCTGTGAATGAAGACTGTGAGC
TGAAGATTCTGGATTTTGGACTGGCTCGGCACACAGATGATGAAATGACAGGCTACGTGGCCACTAGGTG
GTACAGGGCTCCTGAGATCATGCTGAACTGGATGCATTACAACCAGACAGTTGATATTTGGTCAGTGGGA
TGCATAATGGCCGAGCTGTTGACTGGAAGAACATTGTTTCCTGGTACAGACCATATTGATCAGTTGAAGC
TCATTTTAAGACTCGTTGGAACCCCAGGGGCTGAGCTTTTGAAGAAAATCTCCTCAGAGTCTCTGTCGAC
TTGCTGGAGAAGATGCTTGTATTGGACTCAGATAAGAGAATTACAGCGGCCCAAGCCCTTGCACATGCCT
ACTTTGCTCAGTACCACGATCCTGATGATGAACCAGTGGCCGATCCTTATGATCAGTCCTTTGAAAGCAG
GGACCTCCTTATAG

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_139014 unedited
ACCGCCGTTCAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCATTTAGGTGA
CACTATAGAATACAAGCTACTTGTTCTTTTTGCAGCGGCCGCGAATTCGGCACGAGGGCCCCACAGGGCC
ACCTTCTTGCCCGGCGGCTGCCGCTGGAAAATGTCTCAGGAGAGGCCCACGTTCTACCGGCAGGAGCTGA
ACAAGACAATCTGGGAGGTGCCCGAGCGTTACCAGAACCTGTCTCCAGTGGGCTCTGGCGCCTATGGCTC
TGTGTGTGCTGCTTTTTGACACAAAAAACGGGGGTTACGTGGTGGGCAGTGATGAACCTCTCCCAGACCA
TTTGTAGTTCATTCATTTCATGCCAAAAAGAACCCTACAGAGAAACTGCGGTAACTTAACCTAAGGAAAA
CATGAAATGTGGAATTGGCCGGGTTGAAACGTTTTTACCCCTGCAAGGTCCTGGGAGGGAATTATGGGAT
GTGTTCTGGGGGGCCATCTCTAAGGGGGGCAAACTGAAACCAAATTTGGAAAGTGTCAAACCTTAACAAA
AAAACCGGTTTATTTTCTTTTTTACCCAAATTTCCCAGGGGTTAAAGTTTTACACTTTTCCCTAAAAAAT
TTTACAGGGACCCTAACCCCGAAAACCCCCCCGGAAGAAGAAAACGGGAGCCAAAAAATCGGGATTTTGA
AGGGGGGGGGCAAAAAAAATTAGTTTTTTGAACCCCTTTTTAAACCTTGGGGGCCCCGGGGGGCGACTTT
TGAAAAAACACCTCTAAAATCGTGAAAAATATTTATCTTTTTTCCCCTGCCCAAAAAACTTTTGAAGATG
TATTTGTGGCGCACACCCGCGGTCGCTTCTGGGGAGAGATGTGTTTTGCTCCTACAAAATATATAGCGCC
GCCCTCGCTCGCATATGTCTCCACACACTGTGAAGAGCAGCGCGTCTTTATTCTTCTTTAAAGGAGCGCT
ATT

Kinase Domain Sequence:

>SC323402 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
AWTKTTGMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCATTTAGGTGACAC
TATAGAATACAAGCTACTTGTTCTTTTTGCAGCGGCCGCGAATTCGGCACGAGGGCCCCACAGGGCCACC
TTCTTGCCCGGCGGCTGCCGCTGGAAAATGTCTCAGGAGAGGCCCACGTTCTACCGGCAGGAGCTGAACA
AGACAATCTGGGAGGTGCCCGAGCGTTACCAGAACCTGTCTCCAG

Restriction Sites: Please inquire

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).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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.