

## **Product datasheet for TP317425**

## OriGene Technologies, Inc.

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## p38 (MAPK14) (NM\_001315) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human mitogen-activated protein kinase 14 (MAPK14), transcript

variant 1, 20 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone

>RC217425 representing NM\_001315

or AA Sequence: Red=Cloning site Green=Tags(s)

MSQERPTFYRQELNKTIWEVPERYQNLSPVGSGAYGSVCAAFDTKTGLRVAVKKLSRPFQSIIHAKRTYR ELRLLKHMKHENVIGLLDVFTPARSLEEFNDVYLVTHLMGADLNNIVKCQKLTDDHVQFLIYQILRGLKY IHSADIIHRDLKPSNLAVNEDCELKILDFGLARHTDDEMTGYVATRWYRAPEIMLNWMHYNQTVDIWSV

G

CIMAELLTGRTLFPGTDHINQLQQIMRLTGTPPAYLINRMPSHEARNYIQSLTQMPKMNFANVFIGANPL AVDLLEKMLVLDSDKRITAAQALAHAYFAQYHDPDDEPVADPYDQSFESRDLLIDEWKSLTYDEVISFVP

**PPLDQEEMES** 

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK

**Predicted MW:** 41.3 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.





**RefSeq:** NP 001306

 Locus ID:
 1432

 UniProt ID:
 Q16539

 RefSeq Size:
 3757

 Cytogenetics:
 6p21.31

 RefSeq ORF:
 1080

Synonyms: CSBP; CSBP1; CSBP2; CSPB1; EXIP; Mxi2; p38; p38ALPHA; PRKM14; PRKM15; RK; SAPK2A

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

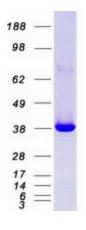
distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

**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

## **Product images:**



Coomassie blue staining of purified MAPK14 protein (Cat# TP317425). The protein was produced from HEK293T cells transfected with MAPK14 cDNA clone (Cat# [RC217425]) using MegaTran 2.0 (Cat# [TT210002]).