

# Recombinant Human Mitogen-Activated Protein Kinase 14, GST-tagged

Cat. No. MAPK14-1046H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant full-length human MAPK14 was expressed in E. coli cells using an N-terminal GST tag.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	MAPK14 (SAPK2A) is a member of the p38 MAPK family which are activated by various environmental stresses and proinflammatory cytokines. The activation of MAPK14 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 MAPK14 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.
<b>Applications</b>	Kinase Assay; Western Blot
<b>Molecular Weight</b>	65 kDa
<b>Expression System</b>	E. coli
<b>Form</b>	Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.1 mM EGTA, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25% glycerol.

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<b>Purity</b>	> 90 %
<b>Concentration</b>	0.1 ug/ul
<b>Sequences</b>	Full-length
<b>Storage</b>	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
<b>Pathways</b>	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; RIG-I-like receptor signaling pathway; T cell receptor signaling pathway; Toll-like receptor signaling pathway; VEGF signaling pathway; Signalling by NGF

## GENE INFORMATION

<b>Gene Name</b>	MAPK14 mitogen-activated protein kinase 14 [ Homo sapiens ]
<b>Official Symbol</b>	MAPK14
<b>Synonyms</b>	MAPK14; mitogen-activated protein kinase 14; RK; p38; EXIP; Mxi2; CSBP1; CSBP2; CSPB1; PRKM14; PRKM15; SAPK2A; p38ALPHA; p38 MAP kinase; p38alpha Exip; MAP kinase Mxi2; Csaids binding protein; MAX-interacting protein 2; stress-activated protein kinase 2A; p38 mitogen activated protein kinase; cytokine suppressive anti-inflammatory drug binding protein; EC 2.7.11.24; Mitogen-activated protein kinase p38 alpha; CSAID-binding protein MAP kinase p38 alpha; MAP kinase MXI2; CSBP; MXI2
<b>Gene ID</b>	1432

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<b>mRNA Refseq</b>	NM_001315
<b>Protein Refseq</b>	NP_001306
<b>MIM</b>	600289
<b>UniProt ID</b>	Q16539
<b>Chromosome Location</b>	6p21.3-p21.2
<b>Function</b>	ATP binding; MAP kinase activity; MAP kinase kinase activity; MP kinase activity; nucleotide binding; protein binding; protein serine/threonine kinase activity; protein serine/threonine kinase activity; transferase activity
<b>PDB rendering based on 1a9u.</b>	

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