

Active Recombinant Human MAPK14 protein

Cat. No. MAPK14-50H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human MAPK14(M1-S360) was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	1-360 a.a.
Description	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.
Form	50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 20% glycerol
Bio-activity	Specific kinase activity (Pi transfer): 893 pmol/g×minATP-KM: 2.7 μ

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Molecular Mass	41,622 Da
AA Sequence	GAFQSIIHAKRT YRELRLKHM KHENVIGLLD VFTPARSLEE FNDVYLVTHL MGADLNNIVK MSQERPTF YRQELNKTIW EVPERYQNLS PVGSGAYGSV CAAFDTKTGL RVAVKKLSRPCQKLTDHVQ FLIYQILRGL KYIHSADIIH RDLKPSNLAV NEDCELKILD FGLARHTDDE MTGYVATRWY RAPEIMLNWM HYNQTVDIWS VGCIMAELLT GRTLFPGETDH INQLQQIMRLTGTPPAYLIN RMPSHEARNY IQSLTQMPKM NFANVFIGAN PLAVIDLLEKM LVLDSDKRIT AAQALAHAYF AQYHDPDDEP VADPYDQSFE SRDLLIDWK SLTYDEVISF VPPPLDQEEMES
Storage	Storage temperature: -80 centigrade. For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µ are not advisable. Avoid repeated freeze-thaw cycles!
Concentration	0.311 g/µ
GENE INFORMATION	
Gene Name	MAPK14 mitogen-activated protein kinase 14 [Homo sapiens]
Official Symbol	MAPK14
Synonyms	MAPK14; mitogen-activated protein kinase 14; CSBP1, CSBP2, CSPB1; Mxi2; p38; p38 MAP kinase; PRKM14; PRKM15; MAP kinase 14; p38alpha Exip; MAP kinase Mxi2; MAP kinase p38 alpha; CSAID-binding protein; Csaid binding protein; MAX-interacting protein 2; stress-activated protein kinase 2A; p38 mitogen activated protein kinase; mitogen-activated protein kinase p38 alpha; cytokine suppressive anti-inflammatory drug binding protein; cytokine suppressive anti-inflammatory drug-binding protein; RK; CSBP; EXIP; CSBP1; CSBP2; CSPB1; SAPK2A; p38ALPHA;

Gene ID	1432
mRNA Refseq	NM_001315
Protein Refseq	NP_001306
MIM	600289
UniProt ID	Q16539
Chromosome Location	6p21.3-p21.2
Pathway	ADP signalling through P2Y purinoceptor 1, organism-specific biosystem; ATF-2 transcription factor network, organism-specific biosystem; Activated TLR4 signalling, organism-specific biosystem; Activation of the AP-1 family of transcription factors, organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), conserved biosystem; Angiopoietin receptor Tie2-mediated signaling, organism-specific biosystem;
Function	ATP binding; MAP kinase activity; MAP kinase kinase activity; NFAT2 protein binding; nucleotide binding; protein binding; protein serine/threonine kinase activity;

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