Recombinant Human MAPK14, GST-tagged, Unactive

Cat. No. MAPK14-25H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human p38alpha was expressed in E. coli cells using an N-terminal GST tag.
Species	Human
Source	E.coli
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	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol.
Molecular Mass	~65 kDa

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Purity	>90%
Applications	Kinase Assay, Western Blot
Stability	1 yr at -70ºC from date of shipment.
Storage	Store product at –70ºC. 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.
Concentration	0.2 ug/ul

GENE INFORMATION

Gene Name	MAPK14 mitogen-activated protein kinase 14 [Homo sapiens (human)]
Official Symbol	MAPK14
Synonyms	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
Gene ID	1432
mRNA Refseq	NM_139012
Protein Refseq	NP_620581

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MIM	600289
UniProt ID	Q16539
Chromosome Location	6p21.3-p21.2
Pathway	ADP signalling through P2Y purinoceptor 1; ATF-2 transcription factor network; Activation of the AP-1 family of transcription factors
Function	ATP binding; MAP kinase activity; MAP kinase kinase activity

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