Active Recombinant Human MAPK14, His-tagged

Cat. No. MAPK14-177H **Lot. No.** (See product label)

SPECIFICATION

Species	Human
Source	E.coli
Description	p38α/SAPK2a belongs to the family of mitogen-activated protein kinases (MAPK). Mitogen-activated protein (MAP) kinases comprise a family of ubiquitous proline-directed, proteinserine/ threonine kinases, which participate in signal transduction pathways that control intracellular events including acute responses to hormones and major developmental changes in organisms. p38α/SAPK2a was discovered independently in three contexts. It was found as a tyrosine phosphoprotein present in extracts of cells treated with inflammatory cytokines; as the target of a pyridinyl imidazole drug that blocked production of tumor necrosis factor-α (TNFα) and as such was called cytokine-suppressive anti-inflammatory drug-binding protein or CSBP; and as a reactivating kinase for MAP kinase-activated protein (MAPKAP) kinase- 2. A variety of agents including cytokines, hormones, GPCRs, osmotic and heat shock, and other stresses activate p38 family members. The recombinant human p38αkinase (SAPK2a) was expressed in*E. coli*and purified by Ni-agarose chromatography.It has a The active form was produced by phosphorylation of the purified p38a with MKK6. It is suitable for labeling p38a kinase substrates. MW = 42.7 kDa.
Form	Supplied in 25 mM Tris-HCl pH 8.5, 150 mM NaCl, 1 mM DTT and 50% glycerol.
Purity	> 95% by SDS-PAGE.

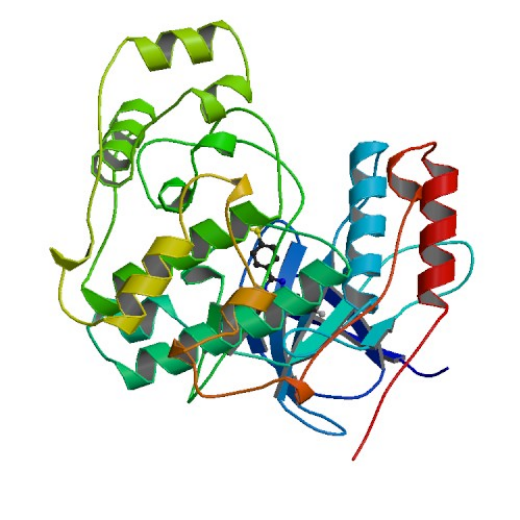
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Activity	> 100,000 U/mg (1 Unit is defined as 1 picomole phosphate transferred to myelin basic protein per min at 30°C) N-terminal His-tagged full-length protein.
Usage	For in vitro use only.
Storage	Quality guaranteed for 12 months store at -80°C. Avoid freeze / thaw cycles.

GENE INFORMATION

Gene Name	MAPK14 mitogen-activated protein kinase 14 [Homo sapiens]
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_001315
Protein Refseq	NP_001306
MIM	600289
UniProt ID	Q16539
Chromosome Location	6p21.3-p21.2

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Pathway	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
Function	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
PDB rendering based on 1a9u.	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA