

Recombinant Human Mitogen-Activated Protein Kinase-Activated Protein Kinase 3, His-tagged

Cat. No. MAPKAPK3-1268H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant humanfull length MAPKAPK3, His-tagged.

Species Human

Source Insect Cells

Description

MAPKAPK3 encodes a member of the Ser/Thr protein kinase family. This kinase functions as a mitogen-activated protein kinase (MAP kinase)- activated protein kinase. MAPKAPK3 are also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This kinase was shown to be activated by growth inducers and stress stimulation of cells. In vitro studies demonstrated that ERK, p38 MAP kinase and Jun N-terminal kinase were all able to phosphorylate and activate this kinase, which suggested the role of this kinase as an integrative element of signaling in both mitogen and stress responses. This kinase was reported to interact with, phosphorylate and repress the activity of E47, which is a basic helix-loop-helix transcription factor known to be involved in the regulation of tissue-specific gene expression and cell differentiation.

Form Liquid in 50 mM Tris, pH 7.5 + 150 mM NaCl + 0.05 mM EDTA + 0.05% Triton X-100 + 2 mM DTT + 50% glycerol

Molecular Weight 47.3 kDa

Concentration 0.42 mg/ml

 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

Purity	≥ 90% as determined by SDS-PAGE analysis
Specific Activity	660 nmole of phosphate transferred to MAPKAPK2 substrate peptide (KKLNRTLVA) per minute per mg of total protein at 30°C. Activity determined at a final protein concentration of 1.67 g/ml.
Storage	Stable for 6 months in working aliquots at -80°C. Avoid repeated freeze-thaw cycles.
Official Symbol	MAPKAPK3
Full Length	Full L.
GENE INFORMATION	
Gene Name	MAPKAPK3 mitogen-activated protein kinase-activated protein kinase 3 [Homo sapiens]
Synonyms	MAPKAPK3; mitogen-activated protein kinase-activated protein kinase 3; 3PK; MAPKAP3; MAPKAPK-3; MAP kinase-activated protein kinase 3; MAPKAP kinase 3; OTTHUMP00000210805; OTTHUMP00000210806; OTTHUMP00000210807; chromosome 3pkinase; MAPK-activated protein kinase 3; EC 2.7.11.1; EC 2.7.11
Gene ID	7867
mRNA Refseq	NM_004635
Protein Refseq	NP_004626
MIM	602130
UniProt ID	Q16644

 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

Chromosome Location	3p21.3
Pathway	Activated TLR4signalling; FAS pathway and Stress induction of HSP regulation; ImmuneSystem; Innate Immune System; MAP kinase activation in TLR cascade; MAPKsignaling pathway; MyD88 cascade initiated on plasma membrane; MyD88dependent cascade initiated on endosome; NFkB and MAP kinases activationmediated by TLR4 signaling repertoire; Signal Transduction; Signalling toERKs; TRAF6 Mediated Induction of proinflammatory cytokines; TRIF mediatedTLR3 signaling; Toll Like Receptor TLR6; VEGF signaling pathway; p38MAPKevents
Function	ATP binding; MAPkinase kinase activity; nucleotide binding; protein binding; proteinserine/threonine kinase activity
Rendering based onPDB 3FHR.	

 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