

Recombinant Human Mitogen-Activated Protein Kinase kinase 4, His-tagged

Cat. No. MAP2K4-597H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MAP2K4 protein, was expressed as 6 his-tagged fusion protein by E. coli and purified by Ni-sepharose.
Species	Human
Source	Human
Description	MAP2K4 encodes a dual specificity protein kinase that belongs to the Ser/Thr protein kinase family. MAP2K4 is a direct activator of MAP kinases in response to various environmental stresses or mitogenic stimuli. It has been shown to activate MAPK8/JNK1, MAPK9/JNK2, and MAPK14/p38, but not MAPK1/ERK2 or MAPK3/ERK1. MAP2K4 is phosphorylated, and thus activated by MAP3K1/MEKK. The knockout studies in mice suggested the roles of this kinase in mediating survival signal in T cell development, as well as in the organogenesis of liver.
Expression Vector	PET28a
Form	The purified protein was resolved in 1 M PBS (58 mM Na ₂ HPO ₄ , 17 mM NaH ₂ PO ₄ , 68 mM NaCl, pH 8.) added with 300 mM Imidazole and 0.7% Sarcosyl, 15% glycerol.
Buffer	PBS based buffer
Sequence	50-399 amino acids

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Molecular Mass	44 kDa
Storage	The protein is stored in PBS buffer at -20°C. Repeated freeze-thaw cycles should be avoided.
GENE INFORMATION	
Gene Name	MAP2K4 mitogen-activated protein kinase kinase 4 [Homo sapiens]
Official Symbol	MAP2K4
Synonyms	MAP2K4; mitogen-activated protein kinase kinase 4; SERK1; SEK1; SAPK/ERK kinase 1; PRKMK4; MKK4; MEK4; MAPKK4; MAPK/ERK kinase 4; MAP kinase kinase 4; JNKK1; JNKK; JNK-activating kinase 1; JNK-activated kinase 1; EC 2.7.12.2; dual specificity mitogen-activated protein kinase kinase 4; Dual specificity mitogen-activated protein kinase kinase 4; c-Jun N-terminal kinase kinase 1
Gene ID	6416
mRNA Refseq	NM_003010
Protein Refseq	NP_003001
MIM	601335
UniProt ID	P45985
Chromosome Location	17p11.2
Pathway	Activated TLR4 signalling; Apoptosis; CD40/CD40L signalling; CDC42 signalling

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events; Cellular roles of Anthrax toxin; Ceramide signaling pathway; Chagas disease (American trypanosomiasis); Cytokine Signaling in Immune system; Ephrin B reverse signaling; Epithelial cell signaling in Helicobacter pylori infection; ErbB signaling pathway; ErbB1 downstream signaling; FAS pathway and Stress induction of HSP regulation; Fc epsilon RI signaling pathway; GnRH signaling pathway

Function

ATP binding; nucleotide binding; protein binding; protein kinase activity; protein serine/threonine kinase activity; protein tyrosine kinase activity

Rendering based on
PDB 3ALN.



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