

Recombinant Human Mitogen-Activated Protein Kinase kinase 5, His-tagged

Cat. No. MAP2K5-492H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MAP2K5 protein, was expressed as 6 his-tagged fusion protein by E. coli and purified by Ni-sepharose.
Species	Human
Source	Human
Description	The protein encoded by MAP2K5 is a dual specificity protein kinase that belongs to the MAP kinase kinase family. MAP2K5 specifically interacts with and activates MAPK7/ERK5. This kinase itself can be phosphorylated and activated by MAP3K3/MEKK3, as well as by atypical protein kinase C isoforms (aPKCs). The signal cascade mediated by this kinase is involved in growth factor stimulated cell proliferation and muscle cell differentiation. Four alternatively spliced transcript variants of this gene encoding distinct isoforms have been described.
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	96-448 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	MAP2K5 mitogen-activated protein kinase kinase 5 [Homo sapiens]
Official Symbol	MAP2K5
Synonyms	MAP2K5; mitogen-activated protein kinase kinase 5; MEK5; MAPKK5; PRKMK5; HsT17454; dual specificity mitogen-activated protein kinase kinase 5; MEK 5; MAPKK 5; MAPK/ERK kinase 5; OTTHUMP00000164363; MAP kinase kinase 5; MAP kinase kinase MEK5b; EC 2.7.12.2; MKK5
Gene ID	5607
mRNA Refseq	NM_001206804
Protein Refseq	NP_001193733
MIM	602520
UniProt ID	Q13163
Chromosome Location	15q23
Pathway	EGFR1 Signaling Pathway; ErbB1 downstream signaling; Focal Adhesi; Gap junction; Insulin Signaling; Integrin-mediated cell adhesion; Integrin-mediated cell adhesion;

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MicroRNAs in cardiomyocyte hypertrophy; NGF signalling via TRKA from the plasma membrane; Neurotrophin signaling pathway; Signalling by NGF; Signalling to ERK5; Signalling to ERK5; Trk receptor signaling mediated by the MAPK pathway

Function

ATP binding; MAP kinase activity; metal ion binding; nucleotide binding; protein binding; protein kinase activity; protein serine/threonine kinase activity; protein tyrosine kinase activity

**PDB renderingbased
on 1wi0.**

