

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

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

## SPECIFICATION

<b>Product Overview</b>	Recombinant human MAP2K5 protein, was expressed as 6 his-tagged fusion protein by E. coli and purified by Ni-sepharose.
<b>Species</b>	Human
<b>Source</b>	Human
<b>Description</b>	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.
<b>Expression Vector</b>	PET28a
<b>Form</b>	The purified protein was resolved in 1 M PBS (58 mM Na <sub>2</sub> HPO <sub>4</sub> , 17 mM NaH <sub>2</sub> PO <sub>4</sub> , 68 mM NaCl, pH 8.) added with 300 mM Imidazole and 0.7% Sarcosyl, 15% glycerol.
<b>Buffer</b>	PBS based buffer
<b>Sequence</b>	96-448 amino acids

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<b>Molecular Mass</b>	44 kDa
<b>Storage</b>	The protein is stored in PBS buffer at -20°C. Repeated freeze-thaw cycles should be avoided.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	MAP2K5 mitogen-activated protein kinase kinase 5 [ Homo sapiens ]
<b>Official Symbol</b>	MAP2K5
<b>Synonyms</b>	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
<b>Gene ID</b>	5607
<b>mRNA Refseq</b>	NM_001206804
<b>Protein Refseq</b>	NP_001193733
<b>MIM</b>	602520
<b>UniProt ID</b>	Q13163
<b>Chromosome Location</b>	15q23
<b>Pathway</b>	EGFR1 Signaling Pathway; ErbB1 downstream signaling; Focal Adhesi; Gap junction; Insulin Signaling; Integrin-mediated cell adhesion; Integrin-mediated cell adhesion;

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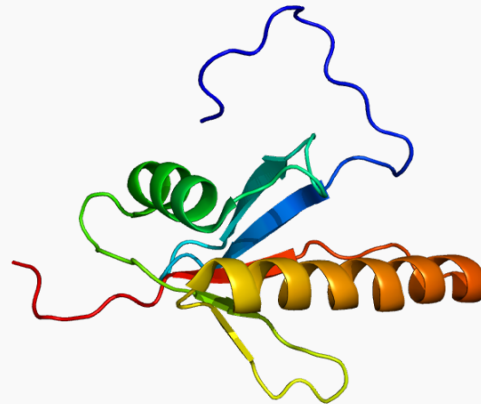
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MicroRNAs in cardiomyocyte hypertrophy; NGF signalling via TRKA from the plasma membrane; Neurotrophin signaling pathway; Signalling by NGF; Signalling to ERK5; Signalling to ERK5; Trk receptor signaling mediated by the MAPK pathway

**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 rendering based  
on 1wi0.



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