MAP2K4 Peptide - N-Terminal Region Blocking Peptide

PRODUCT OVERVIEW

Product Name	MAP2K4, Blocking Peptide
Full Product Name	MAP2K4 Peptide - N-terminal region
Product Gene Name	MAP2K4 blocking peptide
Product Synonym Gene Name	JNKK; MEK4; MKK4; SEK1; SKK1; JNKK1; SERK1; MAPKK4; PRKMK4; SAPKK1; SAPKK-1
Sequence	Synthetic peptide located within the following region: AAPSPSGGGG SGGGSGSGTP GPVGSPAPGH PAVSSMQGKR KALKLNFANP
Species Reactivity	Human
Form/Format	Lyophilized powder
Preparation and Storage	Add 100ul of sterile PBS. Final peptide concentration is 1 mg/ml in PBS. For longer periods of storage, store at -20 degree C. Avoid repeat freeze-thaw cycles.
Antibody/Peptide Pairs	MAP2K4 peptide (MBS3246340) is used for blocking the activity of MAP2K4 antibody (MBS3221607)
Molecular Weight	43 kDa
OMIM	601335
Product Categories/Family for MAP2K4 blocking peptide	Peptide
Related Product Information for MAP2K4 blocking peptide	This is a synthetic peptide designed for use in combination with anti- MAP2K4 Antibody, made Target Description: This gene encodes a member of the mitogen-activated protein kinase (MAPK) family. Members of this family act as an integration point for multiple biochemical signals and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation, and development. They form a three-tiered signaling module composed of MAPKKKs, MAPKKs, and MAPKs. This protein is phosphorylated at serine and threonine residues by MAPKKKs and subsequently phosphorylates downstream MAPK targets at threonine and tyrosine residues. A similar protein in mouse has been reported to play a role in liver organogenesis. A pseudogene of this gene is located on the long arm of chromosome X. Alternative splicing results in multiple transcript variants.
Other Notes	Small volumes of MAP2K4 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for MAP2K4 purchase	MBS3246340 is a blocking peptide targeting MAP2K4. Also known as MAP2K4 Peptide - N-terminal region. Reactive in Human.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MAP2K4. It may not necessarily be applicable to this product.

NCBI GI #	526479851
NCBI GeneID	6416
NCBI Accession #	NP_001268364.1
UniProt Primary Accession #	P45985
UniProt Related Accession #	P45985
GenBank Nucleotide #	NM_001281435.1

NCBI Official Full Name	dual specificity mitogen-activated protein kinase kinase 4 isoform 2
NCBI Official Synonym Full Names	mitogen-activated protein kinase kinase 4
NCBI Official Symbol	MAP2K4
NCBI Official Synonym Symbols	JNKK; MEK4; MKK4; SEK1; SKK1; JNKK1; SERK1; MAPKK4; PRKMK4; SAPKK1; SAPKK-1
UniProt Protein Name	Dual specificity mitogen-activated protein kinase kinase 4
UniProt Synonym Protein Names	JNK-activating kinase 1; MAPK/ERK kinase 4; MEK 4; SAPK/ERK kinase 1; SEK1; Stress-activated protein kinase kinase 1; SAPK kinase 1; SAPKK-1; SAPKK1; c-Jun N-terminal kinase kinase 1
Protein Family	Dual specificity mitogen-activated protein kinase kinase
UniProt Gene Name	MAP2K4
UniProt Synonym Gene Names	JNKK1; MEK4; MKK4; PRKMK4; SEK1; SERK1; SKK1; MAP kinase kinase 4; MAPKK 4; MEK 4; SEK1; SAPK kinase 1; SAPKK-1; SAPKK1; JNKK
UniProt Entry Name	MP2K4_HUMAN
NCBI Protein Information	dual specificity mitogen-activated protein kinase kinase 4
NCBI Summary for MAP2K4	This gene encodes a member of the mitogen-activated protein kinase (MAPK) family. Members of this family act as an integration point for multiple biochemical signals and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation, and development. They form a three-tiered signaling module composed of MAPKKKs, MAPKKs, and MAPKs. This protein is phosphorylated at serine and threonine residues by MAPKKKs and subsequently phosphorylates downstream MAPK targets at threonine and tyrosine residues. A similar protein in mouse has been reported to play a role in liver organogenesis. A pseudogene of this gene is located on the long arm of chromosome X. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]
UniProt Comments for MAP2K4	MKK4: dual specificity kinase of the STE7 family that phosphorylates and activates JNK1 and -2 as well as p38 but not ERK1 or -2. Mediates cellular responses to various cellular stresses and inflammatory cytokines. Phosphorylation by Akt inhibits MKK4 and suppresses stress-activated signal transduction. Protein type: Kinase, protein; EC 2.7.12.2; Protein kinase, STE; Protein kinase, dual-specificity (non-receptor); STE group; STE7 family Chromosomal Location of Human Ortholog: 17p12 Cellular Component: dendrite cytoplasm; axon; perikaryon; intracellular; cytosol; nucleus Molecular Function: protein serine/threonine kinase activity; protein binding; protein-tyrosine kinase activity; mitogen-activated protein kinase kinase kinase binding; JUN kinase kinase activity; ATP binding; protein kinase activity Biological Process: peptidyl-tyrosine phosphorylation; apoptosis; MyD88-independent toll-like receptor signaling pathway; stress-activated MAPK cascade; pathogenesis; toll-like receptor 3 signaling pathway; signal transduction; activation of JNK activity; toll-like receptor 2 signaling pathway; toll-like receptor 10 signaling pathway; toll-like receptor 5 signaling pathway; MyD88-dependent toll-like receptor signaling pathway; positive regulation of neuron apoptosis; toll-like receptor signaling pathway; innate immune response; JNK cascade; toll-like receptor 9 signaling pathway; toll-like receptor 4 signaling pathway; positive regulation of DNA replication; positive regulation of nitric-oxide synthase biosynthetic process
Research Articles on MAP2K4	**1.** These results provide valuable insights into the role of acetylation in MKK4-JNK signaling in T cells.
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