



Human MAPK10 peptide (DAG-P1762)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	The protein encoded by this gene is a member of the MAP kinase family. MAP kinases 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. This protein is a neuronal-specific form of c-Jun N-terminal kinases (JNKs). Through its phosphorylation and nuclear localization, this kinase plays regulatory roles in the signaling pathways during neuronal apoptosis. Beta-arrestin 2, a receptor-regulated MAP kinase scaffold protein, is found to interact with, and stimulate the phosphorylation of this kinase by MAP kinase kinase 4 (MKK4). Cyclin-dependent kinase 5 can phosphorylate, and inhibit the activity of this kinase, which may be important in preventing neuronal apoptosis. Four alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]
Specificity	Specific to a subset of neurons in the nervous system. Present in the hippocampus and areas, cerebellum, striatum, brain stem, and weakly in the spinal cord. Very weak expression in testis and kidney.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	MAPK10 mitogen-activated protein kinase 10 [Homo sapiens (human)]
Official Symbol	MAPK10
Synonyms	MAPK10; mitogen-activated protein kinase 10; JNK3; JNK3A; PRKM10; SAPK1b; p493F12; p54bSAPK; MAPK 10; MAP kinase 10; MAP kinase p49 3F12; JNK3 alpha protein kinase; c-Jun N-terminal kinase 3; stress-activated protein kinase 1b; stress activated protein kinase beta; stress-activated protein kinase JNK3;
Entrez Gene ID	5602
mRNA Refseq	NM_002753.3
Protein Refseq	NP_002744.1
UniProt ID	P53779
Chromosome Location	4q22.1-q23
Pathway	Activated TLR4 signalling, organism-specific biosystem; Activation of the AP-1 family of transcription factors, organism-specific biosystem; Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Apoptosis, organism-specific biosystem; Apoptosis Modulation by HSP70, organism-specific biosystem; BDNF signaling pathway, organism-specific biosystem; CD40/CD40L signaling, organism-specific biosystem; Cellular Senescence, organism-specific
Function	ATP binding; JUN kinase activity; MAP kinase kinase activity; protein binding;