Best Tools for immunology Research

JNK3 protein

Catalog No :	YD0060
Reactivity :	Human
Applications :	WB;SDS-PAGE
Gene Name :	MAPK10
Protein Name :	JNK3 protein
Sequence :	Amino acid: 21-110, with his-MBP tag.
Human Gene Id :	5602
Human Swiss Prot No :	P53779
Mouse Swiss Prot No :	Q61831
Formulation :	Liquid in PBS
Source :	E.coli
Dilution :	WB 1:500-2000
Concentration :	SDS-PAGE >90%
Storage Stability :	-20°C/6 month,-80°C for long storage

Background : alternative products:A similar low level of binding to substrates is observed for isoform alpha-1 and isoform alpha-2. However, there is no correlation between binding and phosphorylation, which is achieved about at the same efficiency by all isoforms,catalytic activity:ATP + a protein = ADP + a phosphoprotein.,caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,cofactor:Magnesium.,disease:A chromosomal rearrangement involving MAPK10 is a cause of epileptic encephalopathy Lennox-Gastaut type [MIM:606369]. Translocation t(Y;4)(q11.2;q21) which causes MAPK10 truncation. Epileptic encephalopathies of the Lennox-Gastaut group are childhood epileptic disorders characterized by severe psychomotor delay and seizures.,domain:The TXY motif contains the

threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by threonine and tyrosine phosphorylation by two dual specificity kinases, MAP2K4 and MAP2K7. MAP2K7 phosphorylates MAPK10 on Thr-221 causing a conformational change and a large increase in Vmax. MAP2K4 then phosphorylates Tyr-223 resulting in a further increase in Vmax. Inhibited by dual specificity phosphatases, such as DUSP1. Inhibited by HDAC9.,function:Responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating a number of transcription factors, primarily components of AP-1 such as c-Jun and ATF2 and thus regulates AP-1 transcriptional activity. Required for stress-induced neuronal apoptosis and the pathogenesis of glutamate excitotoxicity.,mass spectrometry: PubMed:10715136,PTM:Dually phosphorylated on Thr-221 and Tyr-223, which activates the enzyme. Weakly autophosphorylated on threonine and tyrosine residues in vitro.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with MAPKBP1 (By similarity). Binds to at least four scaffolding proteins, MAPK8IP1/JIP-1, MAPK8IP2/JIP-2, MAPK8IP3/JIP-3/JSAP1 and SPAG9/MAPK8IP4/JIP-4. These proteins also bind other components of the JNK signaling pathway. Interacts with HDAC9.,tissue 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.,

Function : MAPKKK cascade, protein amino acid phosphorylation, phosphorus metabolic process, phosphate metabolic process,intracellular signaling cascade, protein kinase cascade, JNK cascade, phosphorylation, stress-activated protein kinase signaling pathway, cellular response to stress,

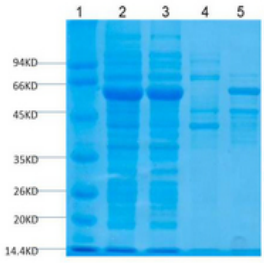
Subcellular Location : Cytoplasm . Membrane ; Lipid-anchor . Nucleus . Mitochondrion . Palmitoylation regulates MAPK10 trafficking to cytoskeleton. Recruited to the mitochondria in the presence of SARM1 (By similarity). .

Expression : 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.

Sort : 8809

Host : Rabbit

Products Images



1：marker
2：F183柱前
3：F183穿透
4：洗脱液1
5：洗脱液2
分子量：60KD
缓冲液：1xPBS
（含咪唑洗脱液和甘油）