



MEK Kinase-4 Polyclonal Antibody

Catalog No	YP-Ab-14833
Isotype	IgG
Reactivity	Human;Mouse
Applications	IHC;IF;ELISA
Gene Name	MAP3K4
Protein Name	Mitogen-activated protein kinase kinase kinase 4
Immunogen	The antiserum was produced against synthesized peptide derived from human MAP3K4. AA range:1281-1330
Specificity	MEK Kinase-4 Polyclonal Antibody detects endogenous levels of MEK Kinase-4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MAP3K4; KIAA0213; MAPKKK4; MEKK4; MTK1; Mitogen-activated protein kinase kinase kinase 4; MAP three kinase 1; MAPK/ERK kinase kinase 4; MEK kinase 4; MEKK 4
Observed Band	
Cell Pathway	Cytoplasm, perinuclear region . Localized in perinuclear vesicular-like structures, probably Golgi-associated vesicles. .
Tissue Specificity	Expressed at high levels in heart, placenta, skeletal muscle and pancreas, and at lower levels in other tissues.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:N-terminal autoinhibitory domain interacts with the C-terminal kinase domain, inhibiting kinase activity, and preventing interaction with its substrate, MAP2K6. The GADD45 proteins activate the kinase by binding to the N-terminal domain. Activated by phosphorylation on Thr-1504.,function:Component of a protein kinase signal transduction cascade. Activates the CSBP2, P38 and JNK MAPK pathways, but not the ERK pathway. Specifically phosphorylates and activates MAP2K4 and MAP2K6.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Binds both upstream activators and downstream



substrates in multimolecular complexes. I

Background

The central core of each mitogen-activated protein kinase (MAPK) pathway is a conserved cascade of 3 protein kinases: an activated MAPK kinase kinase (MAPKKK) phosphorylates and activates a specific MAPK kinase (MAPKK), which then activates a specific MAPK. While the ERK MAPKs are activated by mitogenic stimulation, the CSBP2 and JNK MAPKs are activated by environmental stresses such as osmotic shock, UV irradiation, wound stress, and inflammatory factors. This gene encodes a MAPKKK, the MEKK4 protein, also called MTK1. This protein contains a protein kinase catalytic domain at the C terminus. The N-terminal nonkinase domain may contain a regulatory domain. Expression of MEKK4 in mammalian cells activated the CSBP2 and JNK MAPK pathways, but not the ERK pathway. In vitro kinase studies indicated that recombinant MEKK4 can specifically phosphorylate and activate PRKMK6

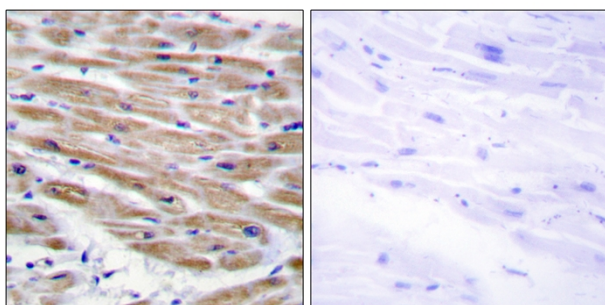
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human heart tissue, using MAP3K4 Antibody. The picture on the right is blocked with the synthesized peptide.