Product Name: **MEK Kinase-4 Rabbit Polyclonal Antibody**
Catalog #: **APRab13794**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	IHC,ICC/IF,ELISA
Reactivity	Human,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	

Antigen Information

Gene Name	MAP3K4
Alternative Names	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
Gene ID	4216.0
SwissProt ID	Q9Y6R4
Immunogen	The antiserum was produced against synthesized peptide derived from human MAP3K4. AA range:1281-1330

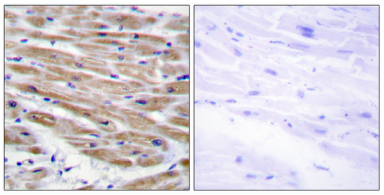
Background

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 PRKMK6catalytic 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. Interacts with AXIN1 and DIXDC1; interaction with DIXDC1 prevents interaction with AXIN1.,tissue specificity:Expressed at high levels in heart, placenta, skeletal muscle and pancreas, and at lower levels in other tissues.,

Research Area

MAPK_ERK_Growth;MAPK_G_Protein;GnRH;

Image Data



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