



MEK-3 (phospho Thr222) Polyclonal Antibody

Catalog No	YP-Ab-14494
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	MAP2K3
Immunogen	The antiserum was produced against synthesized peptide derived from human MAP2K3 around the phosphorylation site of Thr222. AA range:188-237
Specificity	Phospho-MEK-3 (T222) Polyclonal Antibody detects endogenous levels of MEK-3 protein only when phosphorylated at T222.
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	WB: 1/500 - 1/2000. 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	MEK3;Dual specificity mitogen-activated protein kinase kinase 3;EC:2.7.12.2; MAP kinase kinase 3;MAPK/ERK kinase 3;MEK-3;MAP2K3;MKK3;PRKMK3;SKK2;MAPKK 3;MEK 3;Stress-activated protein kinase kinase 2;SAPK kinase 2;SAPKK-2;SAPKK2
Observed Band	39kD
Calculated Molecular Weight	39kD
Cell Pathway	nucleoplasm,cytoplasm,cytosol,membrane,
Tissue Specificity	Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in MAP2K3 may be involved in colon cancer.,enzyme regulation:Activated by dual phosphorylation on Ser-218 and Thr-222.,function:Dual specificity kinase. Is activated by cytokines and environmental stress in vivo. Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in the MAP kinase p38.,PTM:Autophosphorylated.,PTM:Phosphorylation on Ser-218 and Thr-222 by MAP kinase kinase kinases regulates positively the kinase activity.,PTM:Yersinia yopJ may acetylate Ser/Thr residues, preventing phosphorylation



and activation, thus blocking the MAPK signaling pathway.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Binds to

Background

The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. The inhibition of this kinase is involved in the pathogenesis of Yersina pseudotuberculosis. Multiple alternatively spliced transcript variants that encode distinct isoforms have been reported for this gene. [provided by RefSeq, Jul 2008],

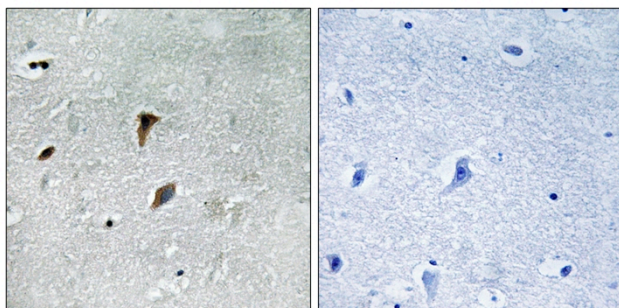
matters needing attention

Avoid repeated freezing and thawing!

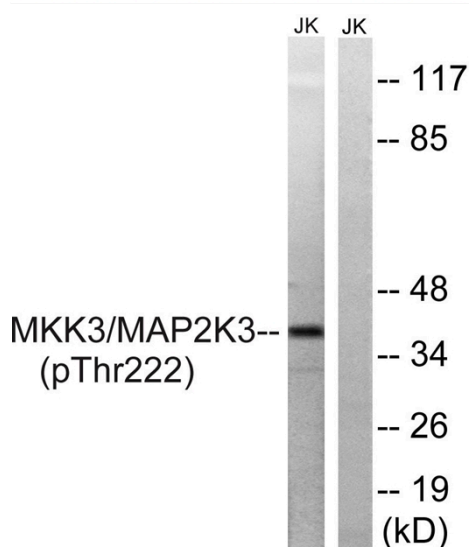
Usage suggestions

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 brain, using MAP2K3 (Phospho-Thr222) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with serum 20% 15', using MAP2K3 (Phospho-Thr222) Antibody. The lane on the right is blocked with the phospho peptide.