

Summary

Production Name	MEK-3 (phospho Ser218) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	MAP2K3
	MAP2K3; MEK3; MKK3; PRKMK3; SKK2; Dual specificity mitogen-activated protein
Alternative Names	kinase kinase 3; MAP kinase kinase 3; MAPKK 3; MAPK/ERK kinase 3; MEK 3; Stress-
	activated protein kinase kinase 2; SAPK kinase 2; SAPKK-2; SAPKK2
Gene ID	5606.0
SwissProt ID	P46734.The antiserum was produced against synthesized peptide derived from human
	MKK3 around the phosphorylation site of Ser189. AA range:173-222

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000
Molecular Weight	39kD



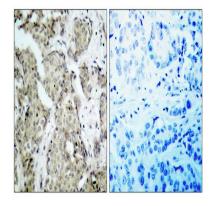
Background

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], 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 DYRK1B/MIRK and increases its kinase activity. Part of a complex with MAP3K3, RAC1 and CCM2. Interacts with Yersinia yopJ.,tissue specificity:Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues.,

Research Area

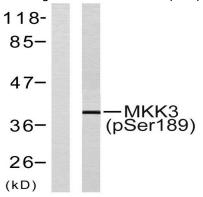
Regulates Angiogenesis; Stem cell pathway; Regulation of Actin Dynamics; Toll_Like; Cell Growth; MAPK_ERK_Growth; MAPK_G_Protein; B Cell Receptor

Image Data

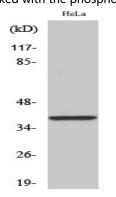




Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MKK3 (Phospho-Ser189) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from MDA-MB-435 cells, using MKK3 (Phospho-Ser189) Antibody. The lane on the left is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-MEK-3 (S218) Polyclonal Antibody

Note

For research use only.