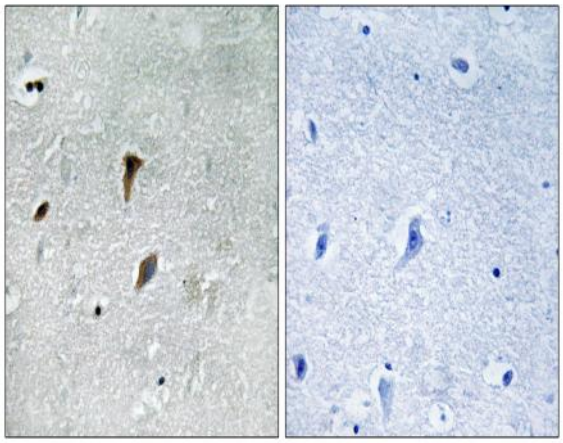
Best Tools for immunology Research

MEK-3 (phospho Thr222) Polyclonal Antibody

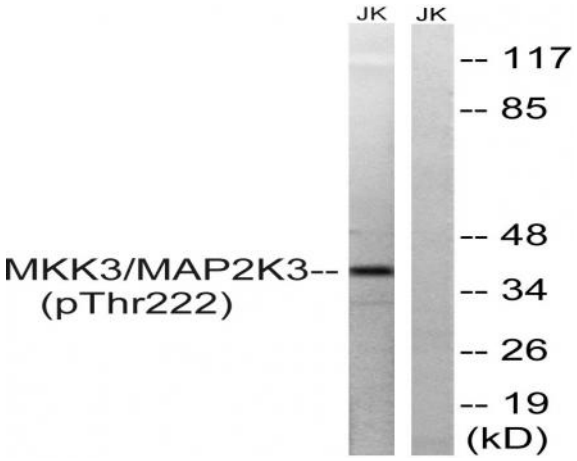
Catalog No :	YP0789
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	MEK-3
Fields :	>>MAPK signaling pathway;>>Rap1 signaling pathway;>>Cellular senescence;>>Toll-like receptor signaling pathway;>>Fc epsilon RI signaling pathway;>>TNF signaling pathway;>>Thermogenesis;>>Inflammatory mediator regulation of TRP channels;>>GnRH signaling pathway;>>Growth hormone synthesis, secretion and action;>>Alcoholic liver disease;>>Amyotrophic lateral sclerosis;>>Pathways of neurodegeneration - multiple diseases;>>Salmonella infection;>>Yersinia infection;>>Toxoplasmosis;>>Hepatitis B;>>Epstein-Barr virus infection;>>Human immunodeficiency virus 1 infection;>>PD-L1 expression and PD-1 checkpoint pathway in cancer;>>Lipid and atherosclerosis
Gene Name :	MAP2K3
Protein Name :	Dual specificity mitogen-activated protein kinase kinase 3
Human Gene Id :	5606
Human Swiss Prot No :	P46734
Mouse Gene Id :	26397
Mouse Swiss Prot No :	O09110
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

Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	39kD
Cell Pathway :	Regulates Angiogenesis; Stem cell pathway; Regulation of Actin Dynamics; Toll_Like; Cell Growth; MAPK_ERK_Growth;MAPK_G_Protein; B Cell Receptor
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],
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
Subcellular Location :	nucleoplasm,cytoplasm,cytosol,membrane,
Expression :	Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues.

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.