

ASK 1 Monoclonal Antibody

Catalog No :	YM0050
Reactivity :	Human
Applications :	WB;IHC;IF;FCM;ELISA
Target :	ASK1
Fields :	>>Platinum drug resistance;>>MAPK signaling pathway;>>Sphingolipid signaling pathway;>>Protein processing in endoplasmic reticulum;>>Apoptosis;>>Tight junction;>>TNF signaling pathway;>>Thermogenesis;>>Neurotrophin signaling pathway;>>Non-alcoholic fatty liver disease;>>Alcoholic liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Spinocerebellar ataxia;>>Pathways of neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive oxygen species;>>Lipid and atherosclerosis;>>Fluid shear stress and atherosclerosis
Gene Name :	MAP3K5
Protein Name :	Mitogen-activated protein kinase kinase kinase 5
Human Gene Id :	4217
Human Swiss Prot No :	Q99683
Mouse Swiss Prot No :	O35099
Immunogen :	Purified recombinant fragment of human ASK 1 expressed in E. Coli.
Specificity :	ASK 1 Monoclonal Antibody detects endogenous levels of ASK 1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

Purification : Affinity purification

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 155kD

Cell Pathway : SAPK_JNK; Regulation of Actin Dynamics; Cell Growth; Stem cell pathway; Cell_Cycle_G1S;Cell_Cycle_G2M_DNA; MAPK_ERK_Growth;MAPK_G_Protein; B Cell Receptor

P References : 1. Mol Cancer. 2009 Dec 27;8:130.
2. J Biol Chem. 2009 Oct 30;284(44):30372-82.

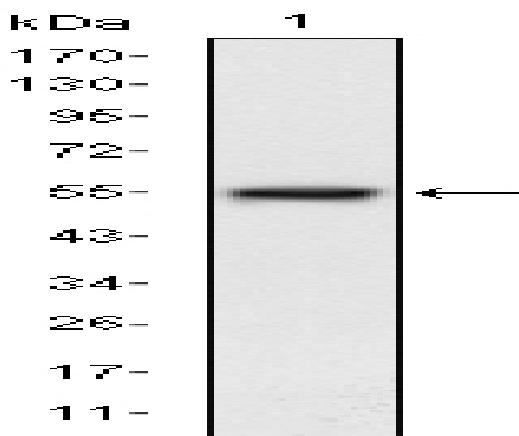
Background : Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates MAPK. The kinases of these signaling cascades are highly conserved, and homologs exist in yeast, Drosophila, and mammalian cells. MAPKKK5 contains 1,374 amino acids with all 11 kinase subdomains. Northern blot analysis shows that MAPKKK5 transcript is abundantly expressed in human heart and pancreas. The MAPKKK5 protein phosphorylates and activates MKK4 (aliases SERK1, MAPKK4) in vitro, and activates c-Jun N-terminal kinase (JNK)/stress-activated protein kinase (SAPK) during transient expression in COS and 293 cells; MAPKKK5 does not activate MAPK/ERK. [provided by Re

Function : catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Contains an N-terminal autoinhibitory domain. Activated by phosphorylation at Thr-838, inhibited by phosphorylation at Ser-966 and Ser-1033. Binds to, and stabilizes MAP3K6 and is activated by MAP3K6 by phosphorylation on Thr-838.,function:Component of a protein kinase signal transduction cascade. Phosphorylates and activates MAP2K4 and MAP2K6, which in turn activate the JNK and p38 MAP kinases, respectively. Overexpression induces apoptotic cell death.,induction:By TNF-alpha. Inhibited by HIV-1 Nef.,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:Homodimer when inactive. Binds both upstream activators and dow

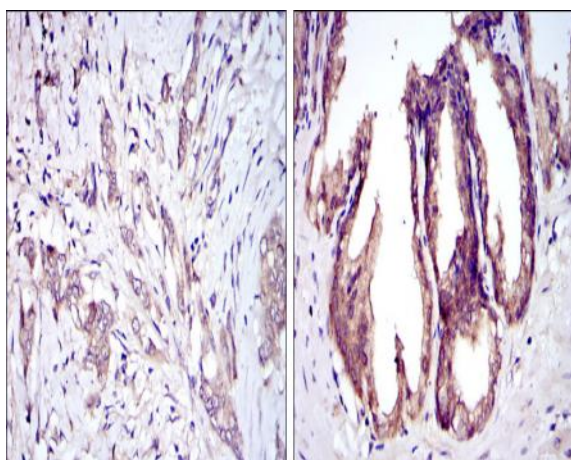
Subcellular Location : Cytoplasm . Endoplasmic reticulum. Interaction with 14-3-3 proteins alters the distribution of MAP3K5/ASK1 and restricts it to the perinuclear endoplasmic reticulum region.

Expression : Abundantly expressed in heart and pancreas.

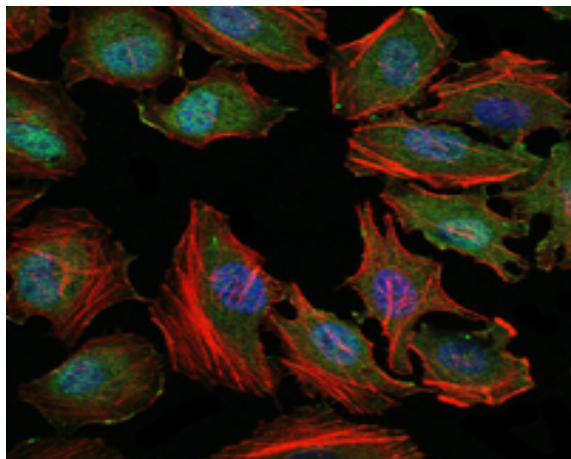
Products Images



Western Blot analysis using ASK 1 Monoclonal Antibody against recombinant protein.



Immunohistochemistry analysis of paraffin-embedded breast cancer tissues (left) and prostate tissues (right) with DAB staining using ASK 1 Monoclonal Antibody.



Immunofluorescence analysis of HeLa cells using ASK 1 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

Flow cytometric analysis of Hela cells using ASK 1 Monoclonal Antibody (green) and negative control (purple).

