

ASK 1 Monoclonal Antibody

YM0050 Catalog No:

Reactivity: Human

WB;IHC;IF;FCM;ELISA **Applications:**

ASK1 Target:

>>Platinum drug resistance;>>MAPK signaling pathway;>>Sphingolipid Fields:

> 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 Q99683

No:

Mouse Swiss Prot

No:

O35099

Purified recombinant fragment of human ASK 1 expressed in E. Coli. Immunogen:

ASK 1 Monoclonal Antibody detects endogenous levels of ASK 1 protein. Specificity:

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

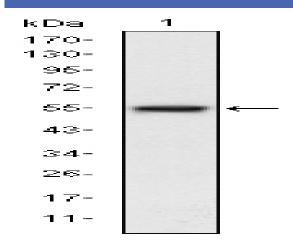
reticulum region.

Expression: Abundantly expressed in heart and pancreas.

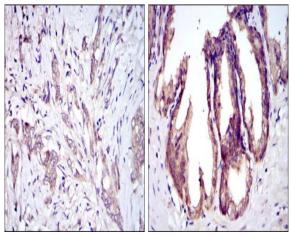
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No4: 1

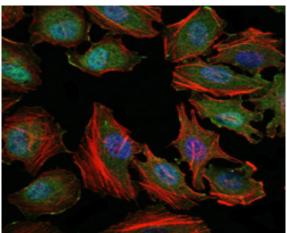
Products Images



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

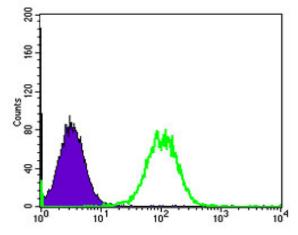


Immunohistochemistry analysis of paraffin-embedded breast cancer tissues (left) and prostate tissues (right) with DAB staining using ASK 1 Monoclonal Antibody.



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.

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

