

MLTK Polyclonal Antibody

Catalog No: YT2790

Reactivity: Human; Mouse

Applications: WB;IHC

Target: MLTK

Fields: >>MAPK signaling pathway

Q9NYL2

Q9ESL4

Gene Name: MLTK

Protein Name: Mitogen-activated protein kinase kinase kinase MLT

Human Gene Id: 51776

Human Swiss Prot

Iuman Swiss Prot

No:

Mouse Gene Id: 65964

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

MLTK. AA range:701-750

Specificity: MLTK Polyclonal Antibody detects endogenous levels of MLTK protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000;IHC 1:50-300

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 91kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;Tight junction;

Background: This gene is a member of the MAPKKK family of signal transduction molecules

and encodes a protein with an N-terminal kinase catalytic domain, followed by a leucine zipper motif and a sterile-alpha motif (SAM). This magnesium-binding protein forms homodimers and is located in the cytoplasm. The protein mediates gamma radiation signaling leading to cell cycle arrest and activity of this protein plays a role in cell cycle checkpoint regulation in cells. The protein also has proapoptotic activity. Alternate transcriptional splice variants, encoding different

isoforms, have been characterized. [provided by RefSeq, Jul 2008],

Function: catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Activated by phosphorylation by PKN1 and autophosphorylation on Thr-161 and Ser-165.,function:Stress-activated component of a protein kinase signal

transduction cascade. Regulates the JNK and p38 pathways. Pro-apoptotic. Role in regulation of S and G2 cell cycle checkpoint by direct phosphorylation of CHEK2. Isoform 1, but not isoform 2, causes cell shrinkage and disruption of actin stress fibers. Isoform 1 may have role in neoplastic cell transformation and cancer development. Isoform 1, but not isoform 2, phosphorylates histone H3 at 'Ser-28'.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 SAM (sterile alpha motif) domain.,subcellular

location:Tr

Subcellular Location:

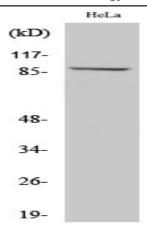
Cytoplasm . Nucleus . Translocates to the nucleus upon ultraviolet B irradiation. .

Expression:

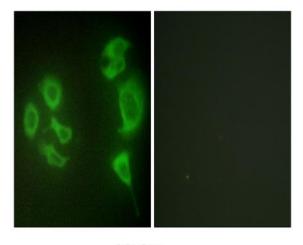
Ubiquitously expressed. Isoform 2 is the predominant form in all tissues examined, except for liver, in which isoform 1 is more highly expressed.

Products Images

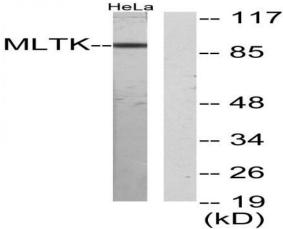
2/4



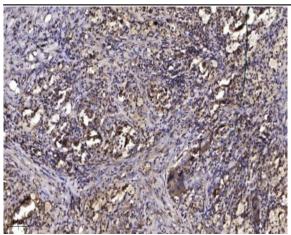
Western Blot analysis of various cells using MLTK Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of HepG2 cells, using MLTK Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using MLTK Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human Squamous cell carcinoma of lung. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).