



MLTK Polyclonal Antibody

Catalog No	YP-Ab-14858
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC
Gene Name	MLTK
Protein Name	Mitogen-activated protein kinase kinase kinase MLT
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000;IHC-p 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MLTK; ZAK; HCCS4; Mitogen-activated protein kinase kinase kinase MLT; Human cervical cancer suppressor gene 4 protein; HCCS-4; Leucine zipper- and sterile alpha motif-containing kinase; MLK-like mitogen-activated protein triple kinase; Mixe
Observed Band	91kD
Cell Pathway	Cytoplasm . Nucleus . Translocates to the nucleus upon ultraviolet B irradiation. .
Tissue Specificity	Ubiquitously expressed. Isoform 2 is the predominant form in all tissues examined, except for liver, in which isoform 1 is more highly expressed.
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

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 pro-apoptotic activity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008],

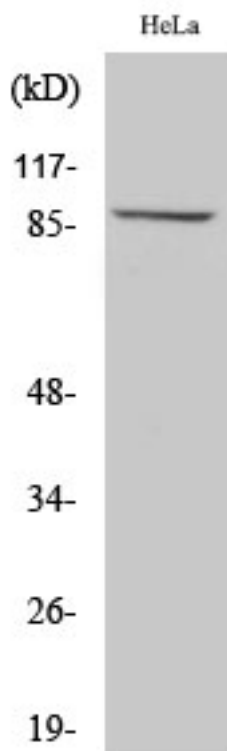
matters needing attention

Avoid repeated freezing and thawing!

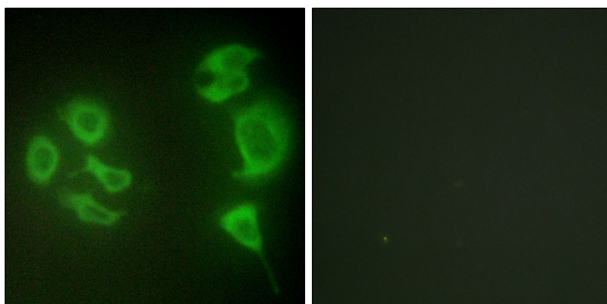
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

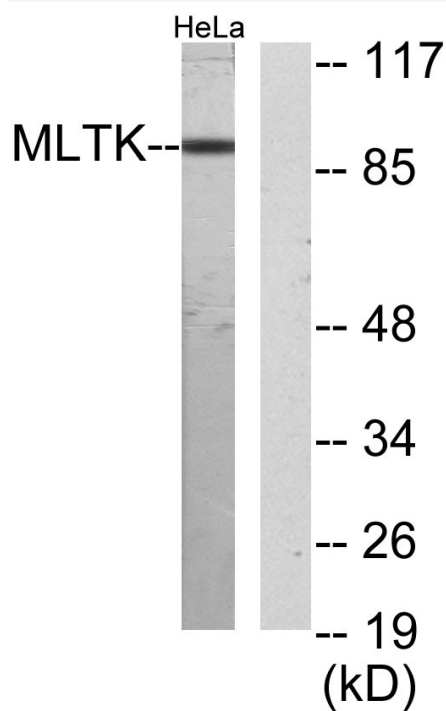
Products Images



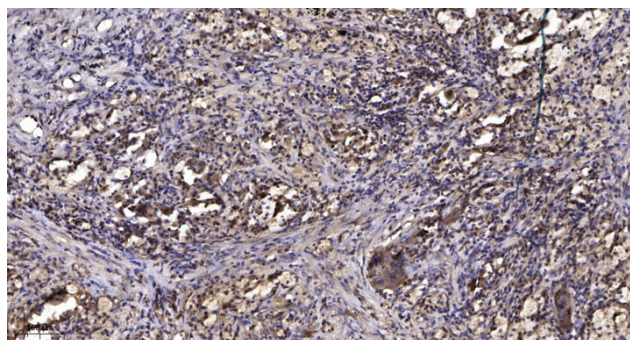
Western Blot analysis of various cells using MLTK Polyclonal Antibody diluted at 1:1000



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).