



# MLTK Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-14858                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Reactivity</b>                  | Human;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Applications</b>                | WB;IHC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Name</b>                   | MLTK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human MLTK. AA range:701-750                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Specificity</b>                 | MLTK Polyclonal Antibody detects endogenous levels of MLTK protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Dilution</b>                    | WB 1:500-2000;IHC-p 1:50-300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Synonyms</b>                    | MAP3K20;Leucine zipper- and sterile alpha motif-containing kinase;HCCS-4; HCCS 4;EC:2.7.11.25;MLTK;Mitogen-activated protein kinase kinase kinase MLT;ZAK;HCCS4;Human cervical cancer suppressor gene 4 protein;MLK-like mitogen-activated protein triple kinase;Mixe                                                                                                                                                                                                                                                                                                                                                     |
| <b>Observed Band</b>               | 91kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Calculated Molecular Weight</b> | 91kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Cell Pathway</b>                | Cytoplasm . Nucleus . Translocates to the nucleus upon ultraviolet B irradiation. .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Tissue Specificity</b>          | Ubiquitously expressed. Isoform 2 is the predominant form in all tissues examined, except for liver, in which isoform 1 is more highly expressed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>                    | 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],

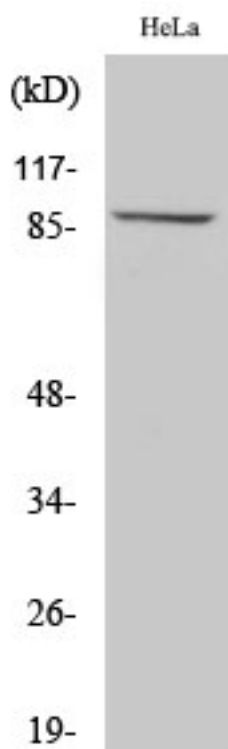
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

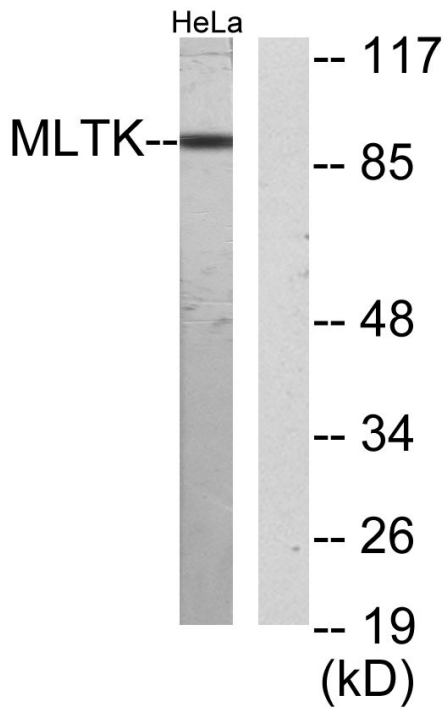
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images

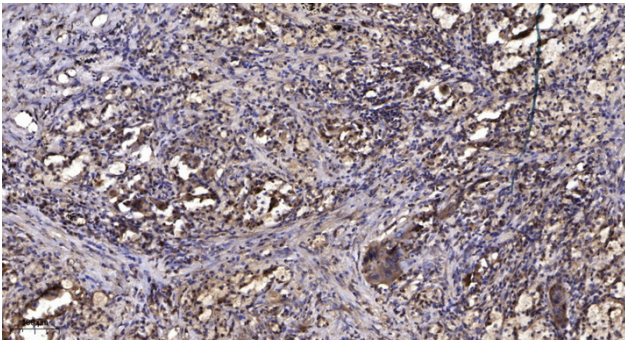


Western Blot analysis of various cells using MLTK Polyclonal Antibody diluted at 1:1000

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).