

MLTK Polyclonal Antibody

Catalog # AP70973

Product Information

Application	WB, IHC-P
Primary Accession	Q9NYL2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	91155

Additional Information

Gene ID	51776
Other Names	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
Dilution	WB--Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P--N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	MAP3K20 (HGNC:17797)
Function	Stress-activated component of a protein kinase signal transduction cascade that promotes programmed cell death in response to various stress, such as ribosomal stress, osmotic shock and ionizing radiation (PubMed: 10924358 , PubMed: 11836244 , PubMed: 12220515 , PubMed: 14521931 , PubMed: 15350844 , PubMed: 15737997 , PubMed: 18331592 , PubMed: 20559024 , PubMed: 26999302 , PubMed: 32289254 , PubMed: 32610081 , PubMed: 35857590). Acts by catalyzing phosphorylation of MAP kinase kinases, leading to activation of the JNK (MAPK8/JNK1, MAPK9/JNK2 and/or MAPK10/JNK3) and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways (PubMed: 11042189 , PubMed: 11836244 , PubMed: 12220515 , PubMed: 14521931 , PubMed: 15172994 , PubMed: 15737997 , PubMed: 32289254 , PubMed: 32610081 , PubMed: 35857590). Activates JNK through phosphorylation of MAP2K4/MKK4 and MAP2K7/MKK7, and MAP kinase p38 gamma (MAPK12) via phosphorylation of MAP2K3/MKK3 and MAP2K6/MKK6 (PubMed: 11836244 ,

PubMed:[12220515](#)). Involved in stress associated with adrenergic stimulation: contributes to cardiac decompensation during periods of acute cardiac stress (PubMed:[15350844](#), PubMed:[21224381](#), PubMed:[27859413](#)). May be involved in regulation of S and G2 cell cycle checkpoint by mediating phosphorylation of CHEK2 (PubMed:[15342622](#)).

Cellular Location

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

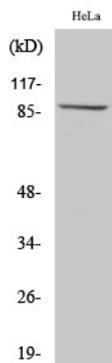
Tissue Location

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

Background

Stress-activated component of a protein kinase signal transduction cascade. Regulates the JNK and p38 pathways. Part of a signaling cascade that begins with the activation of the adrenergic receptor ADRA1B and leads to the activation of MAPK14. Pro-apoptotic. Role in regulation of S and G2 cell cycle checkpoint by direct phosphorylation of CHEK2 (PubMed:[10924358](#), PubMed:[11836244](#), PubMed:[15342622](#), PubMed:[21224381](#)). Involved in limb development (PubMed:[26755636](#)).

Images



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

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