10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MLTK Polyclonal Antibody

Catalog # AP70973

Product Information

Application	WB, IF
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. IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

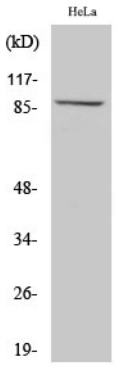
Name	MAP3K20 (HGNC:17797)
Function	Stress-activated component of a protein kinase signal transduction cascade that promotes programmed cell death in response to various stress, such as ribosomal stress, osmotic shock and ionizing radiation (PubMed:10924358, PubMed:11836244, PubMed:12220515, PubMed:14521931, 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