

# Anti-ZAK Antibody

Rabbit polyclonal antibody to ZAK Catalog # AP60939

#### **Product Information**

Application WB
Primary Accession Q9NYL2
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 91155

#### **Additional Information**

**Gene ID** 51776

Other Names MLTK; 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; Mixed lineage kinase-related kinase; MLK-related kinase; MRK; Sterile alpha

motif- and leucine zipper-containing kinase AZK

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human ZAK. The exact sequence is proprietary.

**Dilution** WB~~WB (1/500 - 1/1000)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

## **Protein Information**

Name MAP3K20 ( <u>HGNC:17797</u>)

**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:<u>15737997</u>, PubMed:<u>32289254</u>, PubMed:<u>32610081</u>, PubMed:<u>35857590</u>). 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:<u>11836244</u>, PubMed:<u>12220515</u>). Involved in stress associated with adrenergic stimulation: contributes to cardiac decompensation during periods of acute cardiac stress (PubMed:<u>15350844</u>, PubMed:<u>21224381</u>, PubMed:<u>27859413</u>). May be involved in regulation of S and G2 cell cycle checkpoint by mediating phosphorylation of CHEK2 (PubMed:<u>15342622</u>).

**Cellular Location** 

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

irradiation.

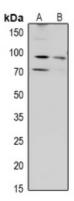
**Tissue Location** 

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

## **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ZAK. The exact sequence is proprietary.

### **Images**



Western blot analysis of ZAK expression in HEK293T (A), HCT116 (B) whole cell lysates.

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