

MLK3 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10314

Specification

MLK3 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>Q16584</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 92688

MLK3 Antibody - Additional Information

Gene ID 4296

Application & Usage

Western blotting (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. The antibody recognizes 92 kDa MLK3 of human, mouse, and rat origins. It does not cross-react with MLK1, MLK2 and other mixed lineage kinases.

Other Names MAP3K11, MLK3, SPRK, MLK-3, PTK1, MGC17114

Target/Specificity MLK3

Antibody Form Liquid

Appearance Colorless liquid

Formulation

100 μ g (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 50% glycerol, 1% BSA, and 0.02% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions



Precautions

MLK3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MLK3 Antibody - Protein Information

Name MAP3K11 (HGNC:6850)

Function

Activates the JUN N-terminal pathway. Required for serum- stimulated cell proliferation and for mitogen and cytokine activation of MAPK14 (p38), MAPK3 (ERK) and MAPK8 (JNK1) through phosphorylation and activation of MAP2K4/MKK4 and MAP2K7/MKK7. Plays a role in mitogenstimulated phosphorylation and activation of BRAF, but does not phosphorylate BRAF directly. Influences microtubule organization during the cell cycle.

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Location is cell cycle dependent

Tissue Location

Expressed in a wide variety of normal and neoplastic tissues including fetal lung, liver, heart and kidney, and adult lung, liver, heart, kidney, placenta, skeletal muscle, pancreas and brain.

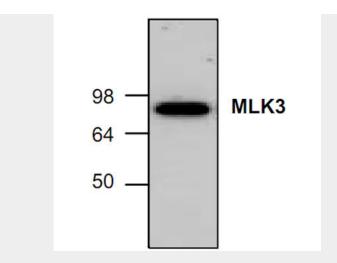
MLK3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MLK3 Antibody - Images





Western blot analysis of MLK3 expression with HeLa cell lysate.

MLK3 Antibody - Background

MLK3 (Mixed lineage kinase 3) is a serine/threonine kinase that has an amino-terminal SH3 domain followed by the kinase domain and two leucine zippers, a cdc42/Rac1 binding (CRIB) domain and several other domains/motifs at the carboxy-terminal region. MLK3 functions as a MAPKKK of the SAPK/JNK stress pathway by directly phosphorylating SEK1/MKK4 and MKK7, altho μ gh it is controversial whether MLK3 is involved in p38 stress pathway activation. MLK3 also functions as an IkB kinase and mediates the activation of the transcriptional factor NF-kB stimulated by CD3/CD28, s μ ggesting a role for MLK3 in immune and inflammatory responses.