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# MST3 Antibody (C-term)
**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP7924a**

## Specification

### MST3 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | Q9Y6E0 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **345-374** |

### MST3 Antibody (C-term) - Additional Information

**Gene ID** 8428

**Other Names**
Serine/threonine-protein kinase 24, Mammalian STE20-like protein kinase 3, MST-3, STE20-like kinase MST3, Serine/threonine-protein kinase 24 36 kDa subunit, Mammalian STE20-like protein kinase 3 N-terminal, MST3/N, Serine/threonine-protein kinase 24 12 kDa subunit, Mammalian STE20-like protein kinase 3 C-terminal, MST3/C, STK24, MST3, STK3

**Target/Specificity**
This MST3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 345-374 amino acids from the C-terminal region of human MST3.

**Dilution**
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
MST3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### MST3 Antibody (C-term) - Protein Information

**Name** STK24 (HGNC:11403)

**Function** Serine/threonine-protein kinase that acts on both serine and threonine residues and promotes apoptosis in response to stress stimuli and caspase activation. Mediates oxidative-stress-induced cell death by modulating phosphorylation of JNK1-JNK2 (MAPK8 and MAPK9), p38 (MAPK11, MAPK12, MAPK13 and MAPK14) during oxidative stress. Plays a role in a staurosporine-induced caspase-independent apoptotic pathway by regulating the nuclear translocation of AIFM1 and ENDOG and the DNase activity associated with ENDOG. Phosphorylates STK38L on 'Thr-442' and stimulates its kinase activity. In association with STK26 negatively regulates Golgi reorientation in polarized cell migration upon RHO activation (PubMed:27807006). Also regulates cellular migration with alteration of PTPN12 activity and PXN phosphorylation: phosphorylates PTPN12 and inhibits its activity and may regulate PXN phosphorylation through PTPN12. May act as a key regulator of axon regeneration in the optic nerve and radial nerve. Part of the striatin-interacting phosphatase and kinase (STRIPAK) complexes. STRIPAK complexes have critical roles in protein (de)phosphorylation and are regulators of multiple signaling pathways including Hippo, MAPK, nuclear receptor and cytoskeleton remodeling. Different types of STRIPAK complexes are involved in a variety of biological processes such as cell growth, differentiation, apoptosis, metabolism and immune regulation (PubMed:18782753).

**Cellular Location**
Cytoplasm. Nucleus. Membrane. Note=The truncated form (MST3/N) translocates to the nucleus. Colocalizes with STK38L in the membrane

**Tissue Location**
Isoform A is ubiquitous. Isoform B is expressed in brain with high expression in hippocampus and cerebral cortex

## MST3 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## MST3 Antibody (C-term) - Images

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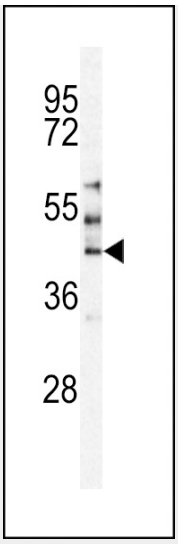
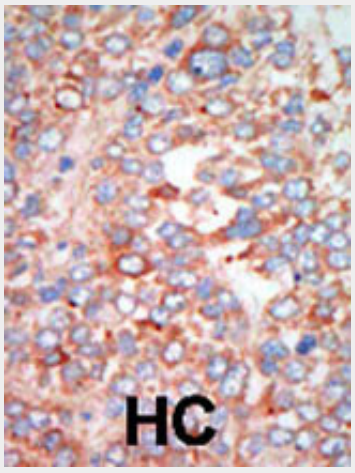



Western blot analysis of MST3 Antibody (C-term) (Cat.#AP7924a) in HepG2 cell line lysates (35ug/lane). MST3 (arrow) was detected using the purified Pab.




Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

## MST3 Antibody (C-term) - Background

The yeast 'Sterile 20' gene (STE20) functions upstream of the mitogen-activated protein kinase (MAPK) cascade. In mammals, protein kinases related to STE20 can be divided into 2 subfamilies based on their structure and regulation. Members of the PAK subfamily (see PAK3; MIM 300142) contain a C-terminal catalytic domain and an N-terminal regulatory domain that has a CDC42 (MIM 116952)-binding domain. In contrast, members of the GCK subfamily (see MAP4K2; MIM 603166), also called the Sps1 subfamily, have an N-terminal catalytic domain and a C-terminal regulatory domain without a CDC42-binding domain. STK24 belongs to the GCK subfamily of STE20-like kinases (Zhou et al., 2000 [PubMed 10644707]).[supplied by OMIM]

## MST3 Antibody (C-term) - References

Huang, C.Y., et al., J. Biol. Chem. 277(37):34367-34374 (2002).
Christian, S.L., et al., Genomics 79(5):635-656 (2002).
Zhou, T.H., et al., J. Biol. Chem. 275(4):2513-2519 (2000).
Schinkmann, K., et al., J. Biol. Chem. 272(45):28695-28703 (1997).