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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

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

Synonyms MST3, STK3

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). Regulates also 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.

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

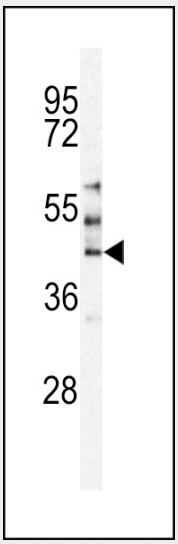
Tissue Location
Isoform A is ubiquitous. Isoform B is expressed in brain with high expression in hippocampus and cerebral cortex

MST3 Antibody (C-term) - Protocols

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

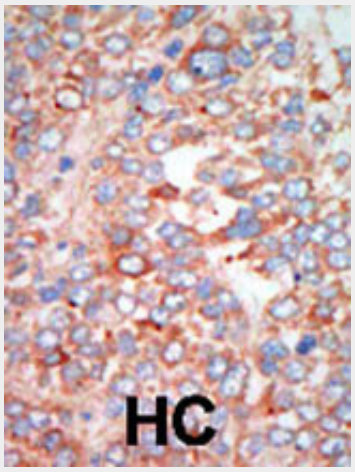
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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).