abcam

Product datasheet

Anti-MST3 antibody ab96705

★★★★★ 2 Abreviews 1 References 2 Images

Overview

Product name Anti-MST3 antibody

Description Rabbit polyclonal to MST3

Host species Rabbit

Tested applications Suitable for: WB. ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Cow

Synthetic peptide containing a sequence corresponding to a region within amino acids 125-189 **Immunogen**

(LREILKGLDY LHSEKKIHRD IKAANVLLSE HGEVKLADFG VAGQLTDTQI KRNTFVGTPF

WMAPE) of Human MST3 (NP 001027467).

Run BLAST with EXPASY Run BLAST with S NCBI

Positive control Raji whole cell lysate; HeLa cells; 293T, A431 and H1299 cell lines

General notes The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer

Preservative: 0.01% Thimerosal (merthiolate)

Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype lgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab96705 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 48 kDa.
ICC/IF	★★★★☆ (1)	1/100 - 1/200.

Target

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. 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.

Tissue specificity

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

Sequence similarities

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. Contains 1 protein kinase domain.

Post-translational

modifications

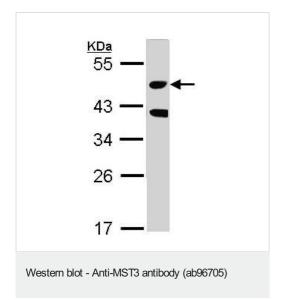
Proteolytically processed by caspases during apoptosis. Proteolytic cleavage results in kinase activation, nuclear translocation of the truncated form (MST3/N) and the induction of apoptosis. Isoform B is activated by phosphorylation by PKA. Oxidative stress induces phosphorylation. Activated by autophosphorylation at Thr-190 and phosphorylation at this site is essential for its function. Manganese, magnesium and cobalt-dependent autophosphorylation is mainly on threonine residues while zinc-dependent autophosphorylation is on both serine and threonine

Cellular localization

 $\label{thm:cytoplasm.} \mbox{Nucleus. Membrane. The truncated form (MST3/N) translocates to the nucleus. Co-part of the control of the cont$

localizes with STK38L in the membrane.

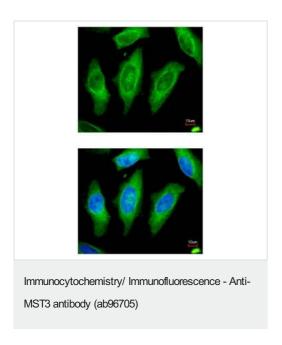
Images



Anti-MST3 antibody (ab96705) at 1/1000 dilution + Raji whole cell lysate at 30 μg

Predicted band size: 48 kDa

10% SDS-PAGE



Immunofluorescence analysis of MST3 in paraformaldehyde-fixed HeLa cells, using ab96705 at 1/200 dilution (top image) and merged with DNA probe (bottom image).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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