

## Product datasheet

# Anti-MST3 antibody ab96705

★★★★☆ 2 Abreviews 2 Images

### Overview

<b>Product name</b>	Anti-MST3 antibody
<b>Description</b>	Rabbit polyclonal to MST3
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat, Cow
<b>Immunogen</b>	Synthetic peptide containing a sequence corresponding to a region within amino acids 125-189 (LREILKGLDY LHSEKKIHRD IKAANVLLSE HGEVKLADFG VAGQLTDTQI KRNTFVGTPF WMAPE) of Human MST3 (NP_001027467). <a href="#">Run BLAST with ExPASy</a> <a href="#">Run BLAST with NCBI</a>
<b>Positive control</b>	Raji whole cell lysate; HeLa cells; 293T, A431 and H1299 cell lines

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.01% Thimerosal (merthiolate) Constituents: 10% Glycerol, 0.1M Tris, 0.1M Glycine, pH 7.0
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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	★★★★☆	1/100 - 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.

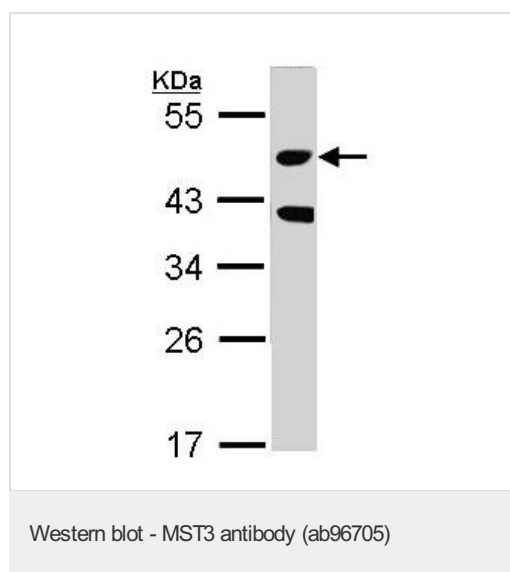
### Post-translational modifications

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 residues.

### Cellular localization

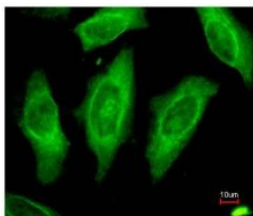
Cytoplasm. Nucleus. Membrane. The truncated form (MST3/N) translocates to the nucleus. Co-localizes with STK38L in the membrane.

## Images

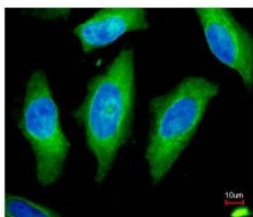


Anti-MST3 antibody (ab96705) at 1/1000 dilution + Raji whole cell lysate at 30 µg

**Predicted band size : 48 kDa**



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



Immunocytochemistry/ Immunofluorescence - MST3 antibody (ab96705)

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