



Rabbit Anti-phospho-MST3 (Thr178) antibody

SL10684R

Product Name:	phospho-MST3 (Thr178)
Chinese Name:	磷酸化丝氨酸/苏氨酸蛋白激酶3抗体
Alias:	MST3 (phospho T178); p-MST3 (phospho T178); Kinase responsive to stress 1; KRS1; Mammalian STE20 like protein kinase 2; Mammalian sterile 20-like 2; Mess1; MST; MST-2; MST2; Mst3; Serine/threonine kinase 3 (STE20 homolog, yeast); Serine/threonine kinase 3 (Ste20, yeast homolog); Serine/threonine protein kinase 3; Serine/threonine protein kinase Krs1; STE20 like kinase MST2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human MST3 around the phosphorylation site of Thr178:RN(p-T)FV
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	STK3 is a stress-activated, pro-apoptotic kinase which, following caspase-cleavage,

enters the nucleus and induces chromatin condensation followed by internucleosomal DNA fragmentation.

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.

Subunit:

Homodimer; mediated via the coiled-coil region. Interacts with NORE1, which inhibits autoactivation. Interacts with and stabilizes SAV1. Interacts with RAF1, which prevents dimerization and phosphorylation. Interacts with RASSF1. Interacts (via SARAH domain) with isoform 1 of NEK2. Interacts with ESR1 only in the presence of SAV1. Interacts with PKB/AKT1. Forms a tripartite complex with MOBKL1B and STK38. Interacts with RASSF2 (via SARAH domain).

Subcellular Location:

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

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.

Similarity:

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

Contains 1 protein kinase domain.

SWISS:

Q9Y6E0

Gene ID:
8428

Database links:

[Entrez Gene: 532455](#) Cow

[Entrez Gene: 8428](#) Human

[Entrez Gene: 223255](#) Mouse

[Entrez Gene: 361092](#) Rat

[Omim: 604984](#) Human

[SwissProt: Q9Y6E0](#) Human

[SwissProt: Q99KH8](#) Mouse

[SwissProt: B0LT89](#) Rat

[Unigene: 508514](#) Human

[Unigene: 390756](#) Mouse

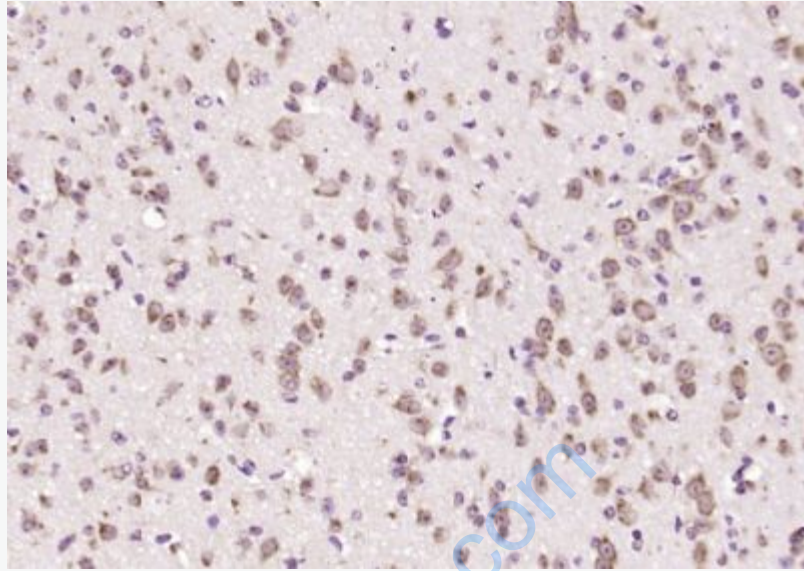
[Unigene: 442081](#) Mouse

[Unigene: 472866](#) Mouse

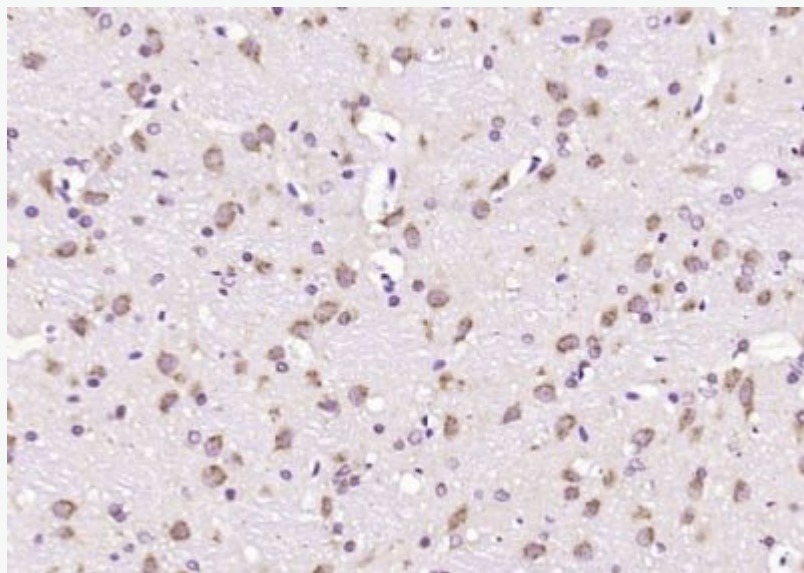
[Unigene: 105397](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-MST3 (Thr178)) Polyclonal Antibody, Unconjugated (SL10684R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Picture:

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