

## LATS1/2 (Phospho Thr1079/1041) Antibody

Catalog No: YP1222

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA

Target: LATS1/2

Fields: >>Hippo signaling pathway;>>Hippo signaling pathway - multiple species

Gene Name: LATS1 WARTS

Protein Name: Serine/threonine-protein kinase LATS1 (EC 2.7.11.1) (Large tumor suppressor

homolog 1) (WARTS protein kinase) (h-warts)

Human Gene Id: 9113

Human Swiss Prot 095835

No:

Mouse Gene Id: 16798

**Mouse Swiss Prot** 

No:

Immunogen: Synthesized phospho derived from human LATS1/2 (Phospho-Thr1079/1041)

**Specificity:** This detects endogenous levels of LATS1/2 (Phospho-Thr1079/1041)

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500-2000, ELISA 1:10000-20000

Q8BYR2

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 140kD

**Background:** 

The protein encoded by this gene is a putative serine/threonine kinase that localizes to the mitotic apparatus and complexes with cell cycle controller CDC2 kinase in early mitosis. The protein is phosphorylated in a cell-cycle dependent manner, with late prophase phosphorylation remaining through metaphase. The N-terminal region of the protein binds CDC2 to form a complex showing reduced H1 histone kinase activity, indicating a role as a negative regulator of CDC2/cyclin A. In addition, the C-terminal kinase domain binds to its own N-terminal region, suggesting potential negative regulation through interference with complex formation via intramolecular binding. Biochemical and genetic data suggest a role as a tumor suppressor. This is supported by studies in knockout mice showing development of soft-tissue sarcomas, ovarian stromal cell tumors and a high sensitivity to carcinogenic treatmen

**Function:** 

catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,cofactor:Magnesium.,function:Tumor suppressor which plays a critical role in maintenance of ploidy through its actions in both mitotic progression and the G1 tetraploidy checkpoint. Negatively regulates G2/M transition by down-regulating CDC2 kinase activity. Involved in the control of p53 expression. Affects cytokinesis by regulating actin polymerization through negative modulation of LIMK1. May also play a role in endocrine function.,PTM:Autophosphorylated and phosphorylated during M-phase of the cell cycle. Phosphorylated by STK3 at Ser-909 and Thr-1079, which results in its activation. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 protein kinase domain.,

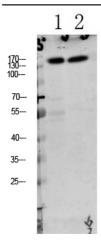
Subcellular Location:

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Midbody. Cytoplasm, cytoskeleton, microtubule organizing center, spindle pole body. Localizes to the centrosomes throughout interphase but migrates to the mitotic apparatus, including spindle pole bodies, mitotic spindle, and midbody, during mitosis...

**Expression:** 

Expressed in all adult tissues examined except for lung and kidney.

## **Products Images**



Western blot analysis of various lysate, antibody was diluted at 1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000

- 1 mouse-brain
- 2 mouse-liver