



LATS1/2 Monoclonal Antibody

Catalog No	YP-mAb-00430
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	LATS1/LATS2
Immunogen	The antiserum was produced against synthesized peptide derived from human LATS1/2. AA range:1041-1090
Specificity	LATS1/2 Monoclonal Antibody detects endogenous levels of LATS1/2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EC:2.7.11.1;h-warts;LATS 1;Serine/threonine-protein kinase LATS1;WARTS; LATS1/2;LATS1/LATS2;Serine/threonine-protein kinase LATS1/2;LATS1;Large tumor suppressor homolog 1;WARTS protein kinase;LATS2;KPM;Serine/threonine-protein kinase LATS2;Kinase phosphorylated during mitosis protein; Large tumor suppressor ho
Observed Band	130-140kD
Calculated Molecular Weight	130-140kD
Cell Pathway	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. .
Tissue Specificity	Expressed in all adult tissues examined except for lung and kidney.
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.,

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 treatment

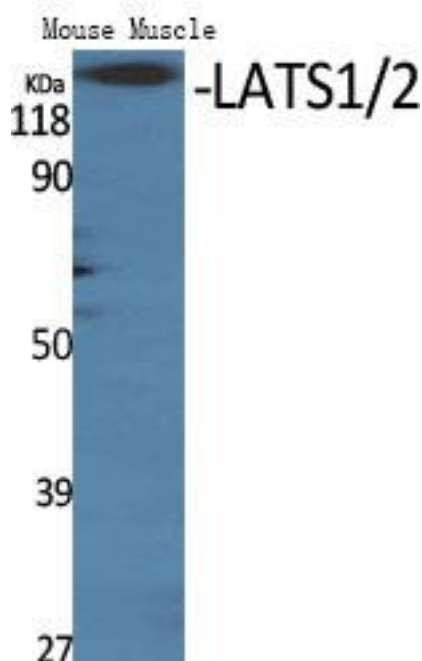
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using LATS1/2 Monoclonal Antibody