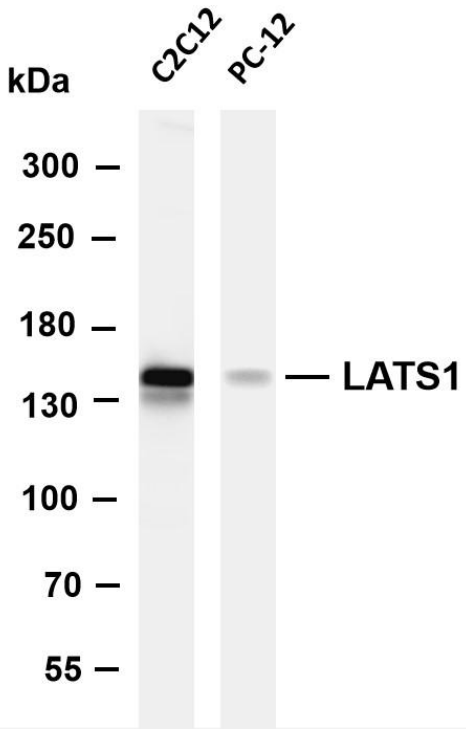
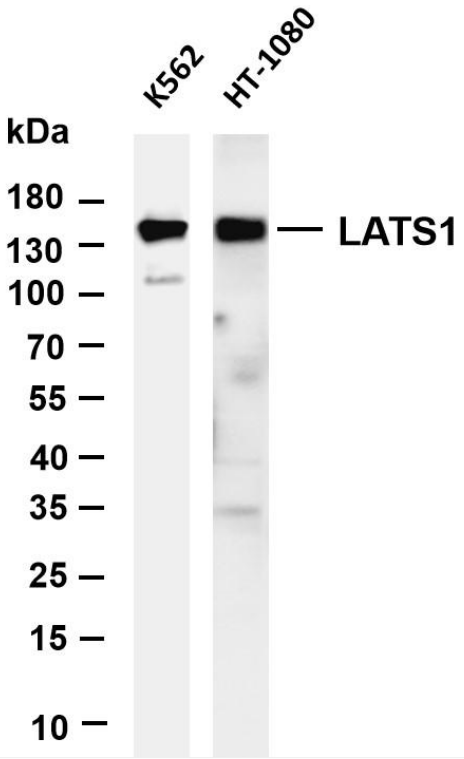
LATS1 Rabbit mAb

Catalog No	YP-rAb-17708
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IF,ELISA
Gene Name	LATS1 WARTS
Protein Name	Serine/threonine-protein kinase LATS1 (Large tumor suppressor homolog 1) (WARTS protein kinase) (h-warts)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	Serine/threonine-protein kinase LATS1 ; Large tumor suppressor homolog 1 ; WARTS protein kinase ; h-warts ;
Observed Band	140kD
Calculated Molecular Weight	127kD
Cell Pathway	Cytoplasm
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.,similarity:Contains 1 UBA domain.,subcellular location:Localizes to the centrosomes throughout interphase but migrates to the mitotic apparatus, including spindle pole bodies, mitotic spindle, and midbody, during mitosis.,subunit:Complexes with CDC2 in early mitosis. LATS1-associated CDC2 has no mitotic cyclin partner and no apparent kinase activity. Binds phosphorylated ZYX, locating this protein to the mitotic spindle and suggesting a role for actin regulatory proteins during mitosis. Binds to and colocalizes with LIMK1 at the actomyosin contractile ring during cytokinesis.,tissue specificity:Expressed in all adult tissues examined except for lung and kidney.,
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
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.



Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-LATS1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: C2C12 Lane 2: PC-12 Predicted band size: 127kDa Observed band size: 140kDa



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-LATS1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: K562 Lane 2: HT-1080 Predicted band size: 127kDa Observed band size: 140kDa