

Rabbit Anti-LATS2 antibody

SL4081R

Product Name:	LATS2
Chinese Name:	Tumour抑制基因LATS2抗体
Alias:	Kinase phosphorylated during mitosis; KPM; Large tumor suppressor homolog 2; Large tumor suppressor homolog 2 Drosophila; LATS large tumor suppressor Drosophila homolog 2; LATS large tumor suppressor homolog 2; Serine/threonine kinase kpm; Serine/threonine protein kinase kpm; Warts like kinase; FLJ13161; Kinase phosphorylated during mitosis protein; Large tumor suppressor kinase 2; Lats2; LATS2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	120kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human LATS2:641-740/1088
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:	This gene encodes a serine/threonine protein kinase belonging to the LATS tumor suppressor family. The protein localizes to centrosomes during interphase, and early and

late metaphase. It interacts with the centrosomal proteins aurora-A and ajuba and is required for accumulation of gamma-tubulin and spindle formation at the onset of mitosis. It also interacts with a negative regulator of p53 and may function in a positive feedback loop with p53 that responds to cytoskeleton damage. Additionally, it can function as a co-repressor of androgen-responsive gene expression. [provided by RefSeq].

Function:

Negative regulator of YAP1 in the Hippo signaling pathway that plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. Acts as a tumor suppressor which plays a critical role in centrosome duplication, maintenance of mitotic fidelity and genomic stability. Negatively regulates G1/S transition by down-regulating cyclin E/CDK2 kinase activity. Negative regulator of the androgen receptor.

Subunit:

Interacts with and is phosphorylated by AURKA. Binds to AR. Interacts with AJUBA during mitosis and this complex regulates organization of the spindle apparatus through recruitment of gamma-tubulin to the centrosome. Interacts (via PPxY motif) with YAP1 (via WW domains). Interacts with MOB1A and MOB1B. Interacts with LIMD1, WTIP and AJUBA.

Subcellular Location:

Cytoplasm, cytoskeleton, centrosome. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole.

Tissue Specificity:

Expressed at high levels in heart and skeletal muscle and at lower levels in all other tissues examined.

Post-translational modifications:

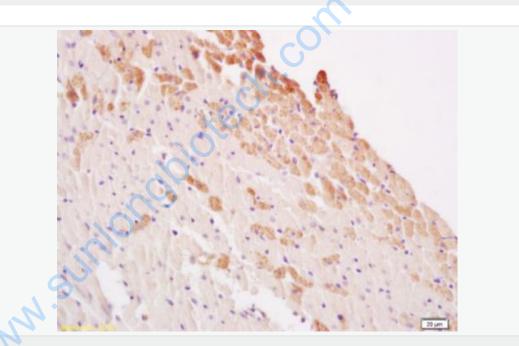
Autophosphorylated and phosphorylated during M-phase and the G1/S-phase of the cell cycle. Phosphorylated and activated by STK3/MST2.

Similarity:

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. Contains 1 AGC-kinase C-terminal domain. Contains 1 protein kinase domain. Contains 1 UBA domain.

	SWISS:
	Q9NRM7
	Gene ID: 26524
	Database links:
	Entrez Gene: 26524 Human
	Entrez Gene: 50523 Mouse
	Entrez Gene: 305922 Rat
	Entrez Gene: 305922 Rat Omim: 604861 Human SwissProt: Q9NRM7 Human SwissProt: Q7TSJ6 Mouse Unigene: 78960 Human Unigene: 347899 Mouse
	SwissProt: Q9NRM7 Human
	SwissProt: Q7TSJ6 Mouse
	Unigene: 78960 Human
	Unigene: 347899 Mouse
	Important Note: This product as supplied is intended for research use only, not for use in human,
	therapeutic or diagnostic applications.
Picture:	

Paraformaldehyde-fixed, paraffin embedded (Rat heart); 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 (LATS2) Polyclonal Antibody, Unconjugated (SL4081R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: rat heart tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-LATS2 Polyclonal Antibody, Unconjugated(SL4081R) 1:200,

overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and

DAB(C-0010) staining

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