Rabbit anti-Human, Mouse lats1/2 Polyclonal Antibody | anti-LATS1 antibody

lats1/2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327187	**Rabbit**	**Human, Mouse**	**ELISA, Immunohistochemistry, Western Blot**

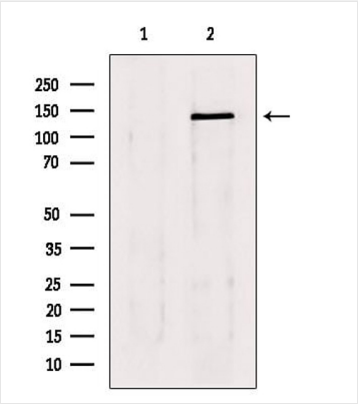
PRODUCT SYNONYMS

lats1/2; Polyclonal Antibody; lats1/2 Antibody; h-warts; Large tumor suppressor homolog 1; LATS large tumor suppressor homolog 1; LATS1; LATS1_HUMAN; Serine threonine protein kinase LATS1; Serine/threonine-protein kinase LATS1; WARTS; WARTS protein kinase; wts; anti-LATS1 antibody

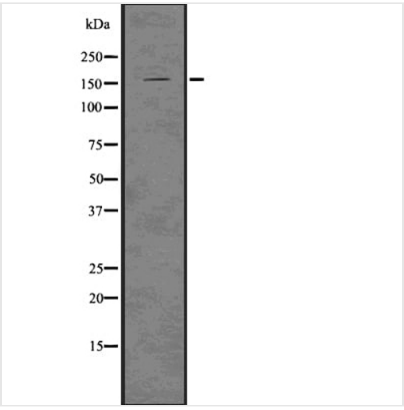
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	lats1 antibody detects endogenous levels of total lats1/2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	690
Applicable Applications for anti-LATS1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human lats1/2
Subcellular Location	Cytoplasm; Cytoskeleton; Centrosome.
Tissue Specificity	Expressed in all adult tissues examined except for lung and kidney.
Predicted Cross Reactivity	**Pig, Bovine, Horse, Sheep, Rabbit**
Similarity	Pig (91%), Bovine (82%), Horse (91%), Sheep (82%), Rabbit (91%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

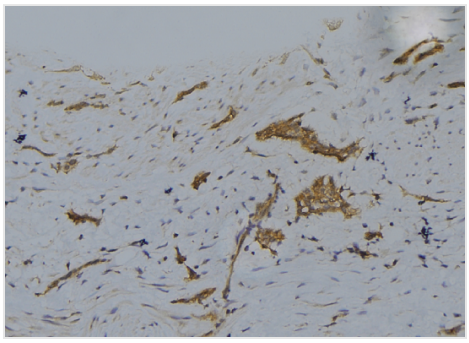
IMAGES



WB (Western Blot)
Western blot analysis of extracts from 293, using lats1/2 Antibody. Lane 1 was treated with the blocking peptide.



WB (Western Blot)
Western blot analysis of lats1/2 using 293 whole cell lysates



IHC (Immunohistochemistry)
AAA327187 at 1/100 staining Human lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-LATS1 antibody	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 LATS1 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 maintenance of ploidy through its actions in both mitotic progression and the G1 tetraploidy checkpoint. Negatively regulates G2/M transition by down-regulating CDK1 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. Plays a role in mammary gland epithelial cells differentiation, both through the Hippo signaling pathway and the intracellular estrogen receptor signaling pathway by promoting the degradation of ESR1 (PubMed:28068668). Subunit Structure: Complexes with CDK1 in early mitosis. LATS1-associated CDK1 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. Interacts (via PPxY motif 2) with YAP1 (via WW domains). Interacts with MOB1A and MOB1B. Interacts with LIMD1, WTIP and AJUBA. Interacts with ESR1, DCAF1 and DCAF13; probably recruits DCAF1 and DCAF13 to ESR1 to promote ESR1 ubiquitination and ubiquitin-mediated proteasomal degradation (PubMed:28068668). Interacts with STK3/MST2; this interaction is inhibited in the presence of DLG5 (PubMed:28087714). Interacts with SCRIB in the presence of DLG5 (PubMed:28169360). Post-translational Modifications: Autophosphorylated and phosphorylated during M-phase of the cell cycle. Phosphorylated by STK3/MST2 at Ser-909 and Thr-1079, which results in its activation. Phosphorylation at Ser-464 by NUAK1 and NUAK2 leads to decreased protein level and is required to regulate cellular senescence and cellular ploidy. Similarity: Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	395394049
NCBI GeneID	9113
NCBI Accession #	NP_001257448.1
NCBI GenBank Nucleotide #	NM_001270519.1
UniProt Accession #	O95835; Q6PKD0
Molecular Weight	Observed: 160 kDa Predicted: 127 kDa
NCBI Official Full Name	serine/threonine-protein kinase LATS1 isoform 2
NCBI Official Synonym Full Names	large tumor suppressor kinase 1
NCBI Official Symbol	LATS1
NCBI Official Synonym Symbols	wts; WARTS
NCBI Protein Information	serine/threonine-protein kinase LATS1
UniProt Protein Name	Serine/threonine-protein kinase LATS1
UniProt Gene Name	**LATS1**
UniProt Synonym Gene Names	h-warts

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://www.aaabiotech.com/polyclonal/lats1-2-antibody-immunohistochemistry-western-blot-elisa/327187