

ARG66834 anti-LATS1 phospho (Thr1079) + LATS2 phospho (Thr1041) antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes LATS1 phospho (Thr1079) + LATS2 phospho (Thr1041)
Tested Reactivity	Hu
Predict Reactivity	Ms
Tested Application	ELISA, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	LATS1 + LATS2
Species	Human
Immunogen	Phosphospecific peptide around Thr1079 of Human LATS1. Phosphospecific peptide around Thr1041 of Human LATS2.
Conjugation	Un-conjugated
Alternate Names	LATS1: wts; Serine/threonine-protein kinase LATS1; WARTS; WARTS protein kinase; h-warts; EC 2.7.11.1; Large tumor suppressor homolog 1 LATS2: KPM

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	IHC-P	
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

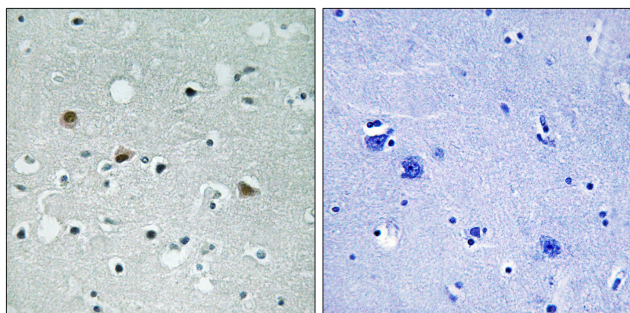
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	LATS1; LATS2
Gene Full Name	large tumor suppressor kinase 1 large tumor suppressor kinase 2
Background	<p>LATS1: 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 treatments. [provided by RefSeq, Apr 2017]</p> <p>LATS2: 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, Jul 2008]</p>
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. [UniProt]
Calculated Mw	LATS1: 127 kDa LATS2: 120 kDa

Images



ARG66834 anti-LATS1 phospho (Thr1079) + LATS2 phospho (Thr1041) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human brain tissue stained with ARG66834 anti-LATS1 phospho (Thr1079) + LATS2 phospho (Thr1041) antibody. The picture on the right is blocked with the phospho peptide.