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

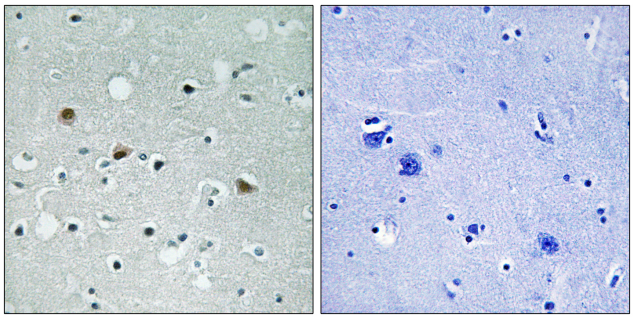
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. 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.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	LATS1; LATS2
Gene Full Name	large tumor suppressor kinase 1 large tumor suppressor kinase 2
Background	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] 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]
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.