

Anti-LATS2 Antibody

Catalog # AP54116

Product Information

Application	WB, IHC, IF
Primary Accession	Q9NRM7
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	120136

Additional Information

Gene ID	26524
Other Names	KPM; Serine/threonine-protein kinase LATS2; Kinase phosphorylated during mitosis protein; Large tumor suppressor homolog 2; Serine/threonine-protein kinase kpm; Warts-like kinase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human LATS2. The exact sequence is proprietary.
Dilution	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	LATS2 {ECO:0000312 EMBL:BAA92381.1}
Synonyms	KPM
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 (PubMed: 18158288 , PubMed: 26437443 , PubMed: 26598551 , PubMed: 34404733). 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 (PubMed: 26437443 , PubMed: 26598551 , PubMed: 34404733). Phosphorylation of YAP1 by LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration (PubMed: 26598551 , PubMed: 34404733). Also phosphorylates YAP1 in

response to cell contact inhibition-driven WWP1 ubiquitination of AMOTL2, which results in LATS2 activation (PubMed:[34404733](#)). Acts as a tumor suppressor which plays a critical role in centrosome duplication, maintenance of mitotic fidelity and genomic stability (PubMed:[10871863](#)). Negatively regulates G1/S transition by down-regulating cyclin E/CDK2 kinase activity (PubMed:[12853976](#)). Negative regulator of the androgen receptor (PubMed:[15131260](#)). Phosphorylates SNAI1 in the nucleus leading to its nuclear retention and stabilization, which enhances its epithelial-mesenchymal transition and tumor cell invasion/migration activities (PubMed:[21952048](#)). This tumor-promoting activity is independent of its effects upon YAP1 or WWTR1/TAZ (PubMed:[21952048](#)). Acts as an activator of the NLRP3 inflammasome by mediating phosphorylation of 'Ser-265' of NLRP3 following NLRP3 palmitoylation, promoting NLRP3 activation by NEK7 (PubMed:[39173637](#)).

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole Nucleus. Note=Colocalizes with AURKA at the centrosomes during interphase, early prophase and cytokinesis. Migrates to the spindle poles during mitosis, and to the midbody during cytokinesis Translocates to the nucleus upon mitotic stress by nocodazole treatment

Tissue Location

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

Background

Rabbit polyclonal antibody to LATS2

Images

Image not found : 202102/CPA6389_WB.jpg

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