

Anti-LATS2 Antibody

Catalog # AP54116

Specification

Anti-LATS2 Antibody - Product Information

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

Anti-LATS2 Antibody - 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

Recognizes endogenous levels of LATS2 protein.

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

Anti-LATS2 Antibody - 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:<a href="http://www.uniprot.org/citations/26437443"

target="_blank">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, PubMed:<a href="http://www.uniprot.org/citations/26598551" target

href="http://www.uniprot.org/citations/34404733" target="_blank">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/a>). 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/a>).

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

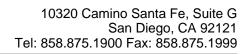
Anti-LATS2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-LATS2 Antibody - Images

Anti-LATS2 Antibody - Background





Rabbit polyclonal antibody to LATS2