

**LATS1/2 (Phospho-Thr1079/1041) Antibody**  
**Catalog # AP68154****Specification****LATS1/2 (Phospho-Thr1079/1041) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O95835</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**LATS1/2 (Phospho-Thr1079/1041) Antibody - Additional Information****Gene ID** 9113**Other Names**

Serine/threonine-protein kinase LATS1 (EC 2.7.11.1) (Large tumor suppressor homolog 1) (WARTS protein kinase) (h-warts)

**Dilution**

WB~~WB 1:500-2000, ELISA 1:10000-20000

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**LATS1/2 (Phospho-Thr1079/1041) Antibody - Protein Information****Name** LATS1 {ECO:0000312|EMBL:AAD16882.1}**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:<a href="http://www.uniprot.org/citations/10518011" target="\_blank">10518011</a>, PubMed:<a href="http://www.uniprot.org/citations/10831611" target="\_blank">10831611</a>, PubMed:<a href="http://www.uniprot.org/citations/18158288" target="\_blank">18158288</a>, PubMed:<a href="http://www.uniprot.org/citations/26437443" target="\_blank">26437443</a>, PubMed:<a href="http://www.uniprot.org/citations/28068668" target="\_blank">28068668</a>). 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/18158288" target="\_blank">18158288</a>, PubMed:<a href="http://www.uniprot.org/citations/26437443" target="\_blank">26437443</a>, PubMed:<a href="http://www.uniprot.org/citations/28068668" target="\_blank">28068668</a>). Phosphorylation of YAP1 by LATS1 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration

(PubMed:<a href="http://www.uniprot.org/citations/18158288" target="\_blank">18158288</a>, PubMed:<a href="http://www.uniprot.org/citations/26437443" target="\_blank">26437443</a>, PubMed:<a href="http://www.uniprot.org/citations/28068668" target="\_blank">28068668</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/15122335" target="\_blank">15122335</a>, PubMed:<a href="http://www.uniprot.org/citations/19927127" target="\_blank">19927127</a>). Negatively regulates G2/M transition by down-regulating CDK1 kinase activity (PubMed:<a href="http://www.uniprot.org/citations/9988268" target="\_blank">9988268</a>). Involved in the control of p53 expression (PubMed:<a href="http://www.uniprot.org/citations/15122335" target="\_blank">15122335</a>). Affects cytokinesis by regulating actin polymerization through negative modulation of LIMK1 (PubMed:<a href="http://www.uniprot.org/citations/15220930" target="\_blank">15220930</a>). May also play a role in endocrine function. Plays a role in mammary gland epithelial cell differentiation, both through the Hippo signaling pathway and the intracellular estrogen receptor signaling pathway by promoting the degradation of ESR1 (PubMed:<a href="http://www.uniprot.org/citations/28068668" target="\_blank">28068668</a>). 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:<a href="http://www.uniprot.org/citations/39173637" target="\_blank">39173637</a>).

#### Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Midbody. Cytoplasm, cytoskeleton, microtubule organizing center, spindle pole body  
Note=Localizes to the centrosomes throughout interphase but migrates to the mitotic apparatus, including spindle pole bodies, mitotic spindle, and midbody, during mitosis.

#### Tissue Location

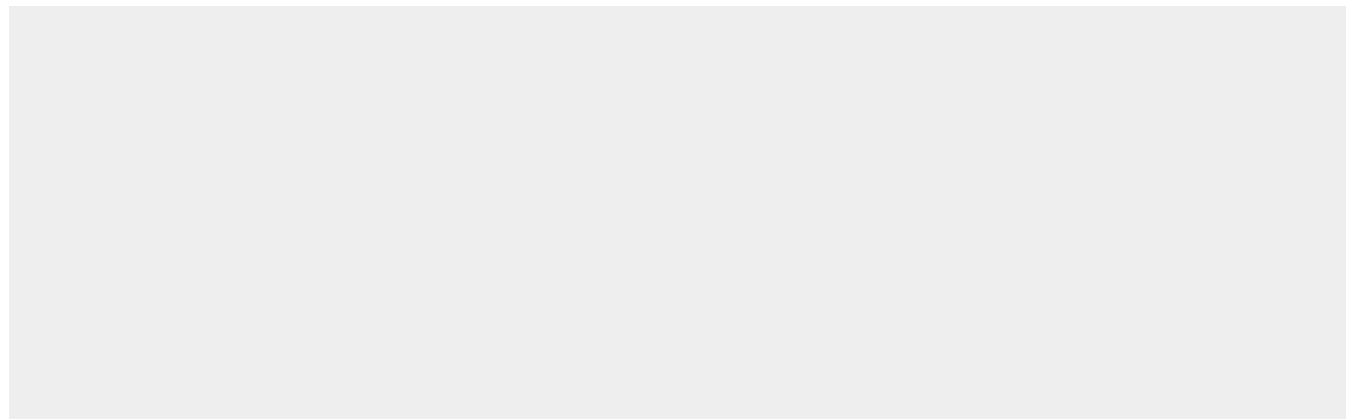
Expressed in all adult tissues examined except for lung and kidney.

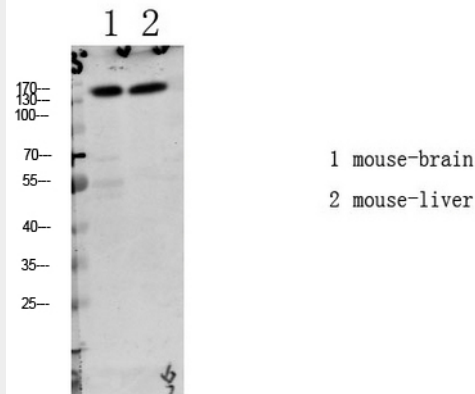
### LATS1/2 (Phospho-Thr1079/1041) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### LATS1/2 (Phospho-Thr1079/1041) Antibody - Images





Western blot analysis of various lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000

### **LATS1/2 (Phospho-Thr1079/1041) Antibody - Background**

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