

## Product datasheet

# Anti-LATS1 antibody ab70562

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### 概述

产品名称	Anti-LATS1抗体
描述	兔多克隆抗体to LATS1
经测试应用	适用于: WB, IP
种属反应性	与反应: Human 预测可用于: Mouse, Rat, Chimpanzee, Rhesus monkey, Gorilla, Orangutan
免疫原	Synthetic peptide corresponding to a region between residue 1075 and the C terminus (residue 1130) of human LATS1 (SwissProt: O95835)
阳性对照	HeLa whole cell lysate

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.09% Sodium Azide Constituents: 8mM PBS, 60mM Citrate, 150mM Tris, pH 7-8
纯度	Immunogen affinity purified
纯化说明	ab70562 was affinity purified using an epitope specific to LATS1 (WARTS) immobilized on solid support.
克隆	多克隆
同种型	IgG

### 应用

Our [Abpromise guarantee](#) covers the use of **ab70562** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB	★ ★ ★ ☆ ☆	1/1000 - 1/10000. Detects a band of approximately 160 kDa (predicted molecular weight: 127 kDa).
IP		Use at 2-5 µg/mg of lysate.

## 靶标

### 功能

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. 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. Negatively regulates G2/M transition by down-regulating CDK1 kinase activity. Involved in the control of p53 expression. Affects cytokinesis by regulating actin polymerization through negative modulation of LIMK1. May also play a role in endocrine function.

### 组织特异性

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

### 序列相似性

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.  
Contains 1 AGC-kinase C-terminal domain.  
Contains 1 protein kinase domain.  
Contains 1 UBA domain.

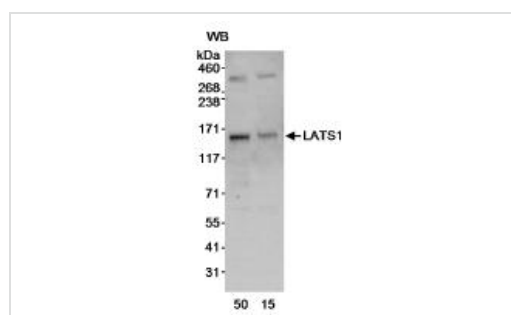
### 翻译后修饰

Autophosphorylated and phosphorylated during M-phase of the cell cycle. Phosphorylated by STK3/MST2 at Ser-909 and Thr-1079, which results in its activation. Phosphorylation at Ser-464 by NUA1 and NUA2 leads to decreased protein level and is required to regulate cellular senescence and cellular ploidy.

### 细胞定位

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

## 图片



Western blot - LATS1 antibody (ab70562)

**All lanes** : Anti-LATS1 antibody (ab70562) at 0.4 µg/ml

**Lane 1** : HeLa whole cell lysate at 50 µg

**Lane 2** : HeLa whole cell lysate at 15 µg

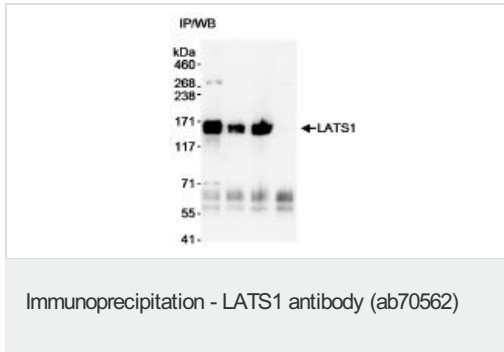
Developed using the ECL technique

**Predicted band size** : 127 kDa

**Observed band size** : 160 kDa

**Additional bands at** : 350 kDa. We are unsure as to the identity of these extra bands.

**Exposure time** : 10 seconds



Detection of human LATS1 by Immunoprecipitation in whole cell lysate from HeLa cells (1 mg, 1/4 of immunoprecipitate loaded per lane), using ab70562 at 3 µg/mg of lysate (lane 3). LATS1 was also immunoprecipitated with ab70562 (lane 1) and with an other LATS1 antibody (lane 2) using 3 µg/mg lysate. Lane 4: Control IgG immunoprecipitate.

Subsequent Western blot detection of LATS1 was performed using ab70562 at 0.4 µg/ml.

Detection: Chemiluminescence with an exposure time of 10 seconds.

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