abcam

Product datasheet

Anti-LATS1/WARTS antibody ab70562

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Overview

Immunogen

Product name Anti-LATS1/WARTS antibody

Description Rabbit polyclonal to LATS1/WARTS

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat, Chimpanzee, Rhesus monkey, Gorilla, Orangutan

Synthetic peptide corresponding to Human LATS1/WARTS aa 1075-1130 (C terminal).

Database link: **O95835**

Positive control WB: HeLa whole cell lysate, mouse TCMK-1, 4T1 and CT26.WT whole cell lysate

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7

Preservative: 0.09% Sodium azide

Constituents: 1.815% Tris, 1.764% Sodium citrate, 0.021% PBS

Purity Immunogen affinity purified

Purification notes ab70562 was affinity purified using an epitope specific to LATS1/WARTS immobilized on solid

support.

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise guarantee

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.

Application	Abreviews	Notes
WB	★★★☆☆(1)	1/1000 - 1/10000. Detects a band of approximately 160 kDa (predicted molecular weight: 127 kDa).

Target

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. 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.

Tissue specificity

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

Sequence similarities

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.

Post-translational modifications

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 NUAK1 and NUAK2 leads to decreased protein level and is required to regulate cellular

senescence and cellular ploidy.

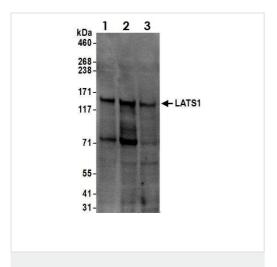
Cellular localization

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.

Images



Western blot - Anti-LATS1/WARTS antibody (ab70562)



Lane 1: TCMK-1 whole cell lysate

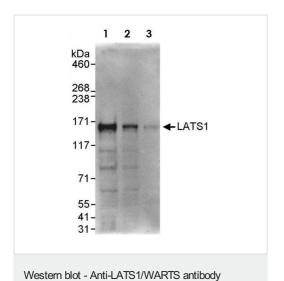
Lane 2: 4T1 whole cell lysate

Lane 3: CT26.WT whole cell lysate

Lysates/proteins at 50 µg per lane.

Predicted band size: 127 kDa

Exposure time: 30 seconds



(ab70562)

All lanes: Anti-LATS1/WARTS antibody (ab70562) at 0.1 µg/ml

Lane 1 : HeLa at 50 µg

Lane 2: HeLa at 15 µg

Lane 3: HeLa at 5 µg

Predicted band size: 127 kDa

Exposure time: 30 seconds

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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