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Datasheet for ABIN872292

anti-LATS1 antibody (pThr1079)

1 Image

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Overview

Quantity:	100 µL
Target:	LATS1
Binding Specificity:	pThr1079
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This LATS1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human LATS1 around the phosphorylation site of Thr1079
Isotype:	IgG
Specificity:	This sequence will cross react with LATS2 if phosphorylated at Thr1041
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Rat,Dog,Cow,Pig,Horse,Chicken,Rabbit
Purification:	Purified by Protein A.

Target Details

Target: LATS1

Alternative Name: LATS1 ([LATS1 Products](#))

Background: Synonyms: wts, WARTS, Serine/threonine-protein kinase LATS1, Large tumor suppressor homolog 1, WARTS protein kinase, h-warts, LATS1

Background: 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.

Gene ID: 9113

UniProt: [O95835](#)

Pathways: [Regulation of Actin Filament Polymerization](#), [Maintenance of Protein Location](#)

Application Details

Application Notes: WB 1:300-5000
ELISA 1:500-1000
IHC-P 1:200-400
IHC-F 1:100-500
IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

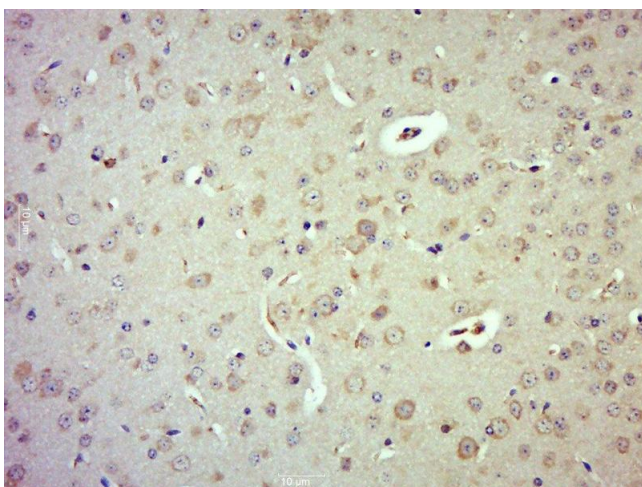
Handling

Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

- Product cited in:
- Moon, Lee, Lee, Lee, Park, Park, Chang, Park, Choi: "STK3/4 Expression Is Regulated in Uterine Endometrial Cells during the Estrous Cycle." in: **Cells**, Vol. 8, Issue 12, (2020) ([PubMed](#)).
- Grijalva, Huizenga, Mueller, Rodriguez, Brazzo, Camargo, Sadri-Vakili, Vakili: "Dynamic alterations in Hippo signaling pathway and YAP activation during liver regeneration." in: **American journal of physiology. Gastrointestinal and liver physiology**, Vol. 307, Issue 2, pp. G196-204, (2014) ([PubMed](#)).

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Paraformaldehyde-fixed, paraffin embedded mouse brain; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with LATS1 (Thr1079) Polyclonal Antibody (bs-7913R) at 1:400 overnight at 4°C, followed by a conjugated secondary for 20 minutes and DAB staining.