



# **LATS1, NT (LATS1, WARTS, Serine/threonine-protein kinase LATS1, Large tumor suppressor homolog 1, WARTS protein kinase)**

## **Catalog number**

037692

## **Supplier**

United States Biological

The protein encoded by this gene is a putative serine/threonine kinase that localizes to the mitotic apparatus and complexes with cell cycle controller CDC2 kinase in early mitosis. The protein is phosphorylated in a cell-cycle dependent manner, with late prophase phosphorylation remaining through metaphase. The N-terminal region of the protein binds CDC2 to form a complex showing reduced H1 histone kinase activity, indicating a role as a negative regulator of CDC2/cyclin A. In addition, the C-terminal kinase domain binds to its own N-terminal region, suggesting potential negative regulation through interference with complex formation via intramolecular binding. Biochemical and genetic data suggest a role as a tumor suppressor. This is supported by studies in knockout mice showing development of soft-tissue sarcomas, ovarian stromal cell tumors and a high sensitivity to carcinogenic treatments.

## **Applications**

Suitable for use in Western Blot, Immunohistochemistry, ELISA

## **Recommended Dilution**

ELISA: 1:1,000

Western Blot: 1:100-500

Immunohistochemistry: 1:50-100

## **Storage and Stability**

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

## **Immunogen**

LATS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1~30 amino acids from the N-terminal region of human LATS1.

## **Formulation**

Supplied as a liquid in PBS, pH 7.2, 0.09% sodium azide.

## **Purity**

Purified by Protein G affinity chromatography.

## **Specificity**

Human, mouse, rat

## **Product Type**



Pab

**Source**

human

**Isotype**

IgG

**Grade**

Affinity Purified

**Applications**

E IHC WB

**Crossreactivity**

Hu Mo Rt

**Storage**

-20°C

**Reference**

Iida, S., et al., *Oncogene* 23(31):5266-5274 (2004).  
Yang, X., et al., *Nat. Cell Biol.* 6(7):609-617 (2004).  
Kamikubo, Y., et al., *J. Biol. Chem.* 278(20):17609-17614 (2003).  
Hisaka, M., et al., *Lab. Invest.* 82(10):1427-1435 (2002).  
Hirota, T., et al., *J. Cell Biol.* 149(5):1073-1086 (2000).