SignalChem
Specialists in Signaling Proteins
1-866-9 KINASE (54-6273)

Catalog #	Aliquot Size
L01-11G -05	5 µg
L01-11G -10	10 µg

LATS1, Active

Recombinant human protein expressed in Sf9 cells

Catalog # L01-11G
Lot # D2485-8

Product Description

Recombinant human LATS1 (589-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is NM_004690.

Gene Aliases

WARTS; wts

Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, and 25% glycerol.

Storage and Stability

Store product at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

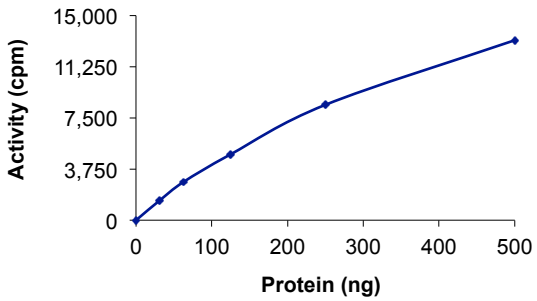
Scientific Background

LATS1 is a putative serine/threonine kinase that localizes to the mitotic apparatus and complexes with cell cycle controller CDC2 kinase in early mitosis which is phosphorylated in a cell-cycle dependent manner. The N-terminal region of the protein binds CDC2 to form a complex showing reduced H1 histone kinase activity which indicating a role as a negative regulator of CDC2/cyclin A and the C-terminal kinase domain binds to its own N-terminal region, suggesting potential negative regulation through interference with complex formation via intramolecular binding (1). LATS1 act as a tumor suppressor and play an important role in the development of soft-tissue sarcomas, ovarian stromal cell tumors and a high sensitivity to carcinogenic treatments (2).

References

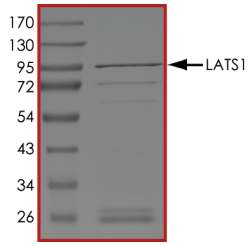
1. Tao, W.et.al: Human homologue of the Drosophila melanogaster lats tumour suppressor modulates CDC2 activity. Nature Genet. 21: 177-181, 1999.
2. St. John. et.al: Mice deficient of Lats1 develop soft-tissue sarcomas, ovarian tumours and pituitary dysfunction. Nature Genet. 21: 182-186, 1999.

Specific Activity



The specific activity of LATS1 was determined to be **1.54 nmol /min/mg** as per activity assay protocol.

Purity



The purity of LATS1 was determined to be **>70%** by densitometry. Approx. MW **95 kDa**.

LATS1, Active

Recombinant human protein expressed in Sf9 cells

Catalog #	L01-11G
Specific Activity	1.54 nmol/min/mg
Lot #	D2485-8
Purity	>70%
Concentration	0.1 µg/µl
Stability	1yr at –70°C from date of shipment
Storage & Shipping	Store product at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
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