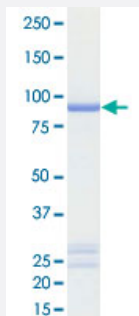


Bioactive

LATS1 (Human) Recombinant Protein

Catalog # P5573 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description	Human LATS1 (NP_004681.1, 589 a.a. - 1130 a.a.) partial recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	90
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	66 % by SDS-PAGE/CBB staining

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip 3000. Substrate: Src tide. ATP: 1000 uM
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — LATS1

Entrez GeneID	9113
Protein Accession#	NP_004681.1
Gene Name	LATS1
Gene Alias	WARTS, wts
Gene Description	LATS, large tumor suppressor, homolog 1 (Drosophila)
Omim ID	603473
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq]

Other Designations

LATS (large tumor suppressor, Drosophila) homolog 1|LATS homolog 1

Disease

- [Adenocarcinoma](#)
- [Esophageal Neoplasms](#)