

LATS1 recombinant protein

Recombinant LATS1 protein

CATALOG #
AAA60177

HOST
Baculovirus

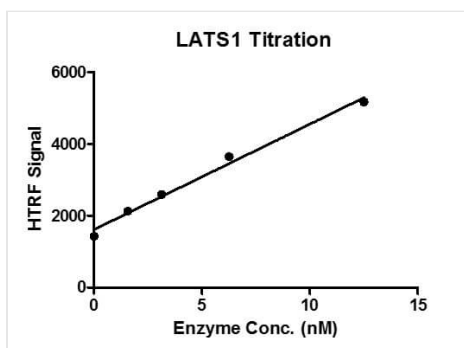
PRODUCT SYNONYMS

LATS1; Recombinant LATS1 protein; Large Tumor Suppressor Kinase 1; WARTS Protein Kinase; LATS1 recombinant protein

PRODUCT SPECIFICATIONS

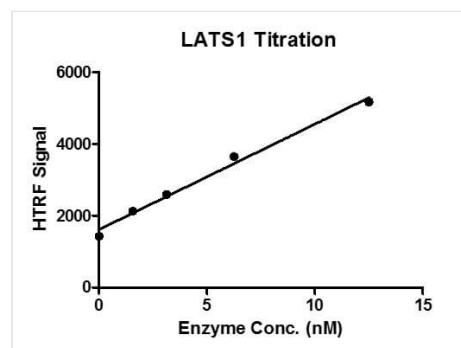
Host	Baculovirus
Form/Format	Recombinant LATS1 protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant LATS1 protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



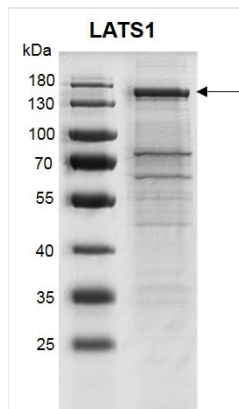
Application Data

HTRF assay for LATS1 protein activity 1 uM STK S1 substrate was incubated with different concentrations of LATS1 protein in a 10 ul reaction system containing 1×Enzymatic Buffer, 5 mM MgCl₂, 1 mM DTT and 100 uM ATP for 1 hr. Then 10 ul detection reagents containing TK antibody and SA-XL665 (each of which was 1:100 diluted with 1× Detection Buffer) were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF KinEASE STK assay was used to detect the enzymatic activity.



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SDS-PAGE

Recombinant LATS1 protein gel 10% SDS-PAGE gel with Coomassie blue staining MW:
128.1 kDa Purity: >73%

ADDITIONAL INFORMATION

Related Product Information for LATS1 recombinant protein

Short Description: Recombinant LATS1 protein was expressed in a baculovirus expression system as the full-length human protein (accession number NP_004681.1) with an N-terminal DYKDDDDK tag. The molecular weight of the protein is 128.1 kDa. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Background: LATS1 (Large Tumor Suppressor Kinase 1) is a putative serine/threonine kinase that localizes to the mitotic apparatus and complexes with cell cycle controller CDC2 kinase in early mitosis. It is phosphorylated in a cell-cycle dependent manner, with late prophase phosphorylation remaining through metaphase. The N-terminal region of LATS1 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 of it 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 that LATS1 play a significant role as a tumor suppressor which is supported by studies in knockout mice showing development of soft-tissue sarcomas, ovarian stromal cell tumors and a high sensitivity to carcinogenic treatments.

Product Categories/Family for LATS1 recombinant protein

Recombinant Proteins; Kinase

NCBI AND UNIPROT INFORMATION

NCBI GI #	4758666
NCBI GeneID	9113
NCBI Accession #	NP_004681.1
NCBI GenBank Nucleotide #	NM_004690.3
Molecular Weight	76,193 Da
NCBI Official Full Name	serine/threonine-protein kinase LATS1 isoform 1
NCBI Official Synonym Full Names	large tumor suppressor kinase 1
NCBI Official Symbol	LATS1
NCBI Official Synonym Symbols	wt5; WARTS
NCBI Protein Information	serine/threonine-protein kinase LATS1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.