

Product datasheet for **RC223650L4V**

LATS1 (NM_004690) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	LATS1 (NM_004690) Human Tagged ORF Clone Lentiviral Particle
Symbol:	LATS1
Synonyms:	WARTS; wts
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_004690
ORF Size:	3390 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC223650).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_004690.2
RefSeq Size:	4756 bp
RefSeq ORF:	3393 bp
Locus ID:	9113
UniProt ID:	O95835
Cytogenetics:	6q25.1
Domains:	UBA, pkinase
Protein Families:	Druggable Genome, Protein Kinase



[View online »](#)

MW: 126.7 kDa

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, Apr 2017]