

# Datasheet for ABIN7564219

# LATS2 Protein (AA 1-1042) (His tag)



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Quantity:	1 mg
Target:	LATS2
Protein Characteristics:	AA 1-1042
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LATS2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Purpose:	Custom-made recombinat Lats2 Protein expressed in mammalien cells.
Sequence:	MRPKTFPATT YSGNSRQRLQ EIREGLKQPS KASTQGLLVG PNSDTSLDAK VLGSKDASRQ
	QQMRATPKFG PYQKALREIR YSLLPFANES GTSAAAEVNR QMLQELVNAG CDQEMAGRAL
	KQTGSRSIEA ALEYISKMGY LDPRNEQIVR VIKQTSPGKG LAPTPVTRRP SFEGTGEALP
	SYHQLGGANY EGPAALEEMP RQYLDFLFPG AGAGTHGAQA HQHPPKGYST AVEPSAHFPG
	THYGRGHLLS EQPGYGVQRS SSFQNKTPPD AYSSMAKAQG GPPASLTFPA HAGLYTASHH
	KPAATPPGAH PLHVLGTRGP TFTGESSAQA VLAPSRNSLN ADLYELGSTV PWSAAPLARR
	DSLQKQGLEA SRPHVAFRAG PSRTNSFNNP QPEPSLPAPN TVTAVTAAHI LHPVKSVRVL
	RPEPQTAVGP SHPAWVAAPT APATESLETK EGSAGPHPLD VDYGGSERRC PPPPYPKHLL
	LPSKSEQYSV DLDSLCTSVQ QSLRGGTEQD RSDKSHKGAK GDKAGRDKKQ IQTSPVPVRK
	NSRDEEKRES RIKSYSPYAF KFFMEQHVEN VIKTYQQKVS RRLQLEQEMA KAGLCEAEQE
	QMRKILYQKE SNYNRLKRAK MDKSMFVKIK TLGIGAFGEV CLACKLDTHA LYAMKTLRKK

DVLNRNQVAH VKAERDILAE ADNEWVVKLY YSFQDKDSLY FVMDYIPGGD MMSLLIRMEV FPEHLARFYI AELTLAIESV HKMGFIHRDI KPDNILIDLD GHIKLTDFGL CTGFRWTHNS KYYQKGNHMR QDSMEPGDLW DDVSNCRCGD RLKTLEQRAQ KQHQRCLAHS LVGTPNYIAP EVLLRKGYTQ LCDWWSVGVI LFEMLVGQPP FLAPTPTETQ LKVINWESTL HIPTQVRLSA EARDLITKLC CAADCRLGRD GADDLKAHPF FNTIDFSRDI RKQPAPYVPT ISHPMDTSNF DPVDEESPWH EASGESAKAW DTLASPSSKH PEHAFYEFTF RRFFDDNGYP FRCPKPSEPA ESADPGDADL EGAAEGCQPV YV Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

## Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

### Grade:

custom-made

### **Target Details**

Target:	LATS2	
Alternative Name:	Lats2 (LATS2 Products)	
Background:	Serine/threonine-protein kinase LATS2 (EC 2.7.11.1) (Kinase phosphorylated during mitosis	
	protein) (Large tumor suppressor homolog 2) (Serine/threonine-protein kinase	
	kpm),FUNCTION: Negative regulator of YAP1 in the Hippo signaling pathway that plays a pivotal	
	role in organ size control and tumor suppression by restricting proliferation and promoting	

apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. Acts as a tumor suppressor which plays a critical role in centrosome duplication, maintenance of mitotic fidelity and genomic stability. Negatively regulates G1/S transition by down-regulating cyclin E/CDK2 kinase activity. Negative regulator of the androgen receptor. Phosphorylates SNAI1 in the nucleus leading to its nuclear retention and stabilization, which enhances its epithelial-mesenchymal transition and tumor cell invasion/migration activities. This tumor-promoting activity is independent of its effects upon YAP1 or WWTR1/TAZ (By similarity). {ECO:0000250, ECO:0000269|PubMed:15343267}.

Molecular Weight:

115.5 kDa

UniProt:

Q7TSJ6

## **Application Details**

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

# Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months