Datasheet for ABIN3135958

LATS2 Protein (AA 1-1042) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	LATS2
Protein Characteristics:	AA 1-1042
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This LATS2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

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 Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.

Product Details

	• We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

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.

Application Details

Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months