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Datasheet for ABIN3093544

LATS2 Protein (AA 1-1088) (Strep Tag)

Overview

Quantity:	1 mg
Target:	LATS2
Protein Characteristics:	AA 1-1088
Origin:	Human
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 YSGNSRQLQ EIREGLKQPS KSSVQGLPAG PNSDTSLDAK VLGSKDATRQ QQQMRATPKF GPYQKALREI RYSLLPFANE SGTSAAAEVN RQMLQELVNA GCDQEMAGRA LKQTGSRSE AALEYISKMG YLDPRNEQIV RVIKQTSPGK GLMPTPVTRR PSFEGTGDSF ASYHQLSGTP YEGPSFGADG PTALEEMPRP YVDYLFPGVG PHGPGHQHQH PPKGYGASVE AAGAHFPLQG AHYGRPHLLV PGEPLGYGVQ RSPSFQSKTP PETGGYASLP TKGQGGPPGA GLAFPPPAAG LYVPHPHHKQ AGPAAHQLHV LGSRSQVFAS DSPPQSLTTP SRNSLNVDLY ELGSTSVQQW PAATLARRDS LQKPGLEAPP RAHVAFRPDC PVPSRTNSFN SHQPRPGPPG KAEPSLPAPN TVTAVTAAHI LHPVKSVRVL RPEPQTAVGP SHPAWVPAPA PAPAPAPAPA AEGLDAKEEH ALALGGAGAF PLDVEYGGPD RRCPPPPYPK HLLRSKSEQ YDLDSLCAKM EQSLRAGPNE PEGGDKSRKS AKGDKGGKDK KQIQTSPPVPV RKNRDEEKR ESRIKSYSPY AFKFFMEQHV ENVIKTYQQK VNRRLQLEQE MAKAGLCEAE QE QMRKILYQ KESNYNRLKR AKMDKSMFVK IKTLGIGAFG EVCLACKVDT HALYAMKTLR KKDVLNRNQV AHVKAERDIL
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AEADNEWVVK LYYSFQDKDS LYFVMDYIPG GDMMSLLIRM EVFPEHLARF YIAELTLAIE
SVHKMGFIHR DIKPDNILID LDGHIKLTDF GLCTGFRWTH NSKYYQKGSV VRQDSMEPSD
LWDDVSNCRG GDRLKTLEQR ARKQHQRCIA HSLVGTPNYI APEVLLRKG Y TQLCDWWSVG
VILFEMLVGQ PPFLAPTPT TQLKVINWEN TLHIPAQVKL SPEARDLITK LCCSADHRLG
RNGADDLKAH PFFSAIDFSS DIRKQPAPYV PTISHPMDTS NFDPVDEESP WNDASEGSTK
AWDTLTSPNN KHPEHAFYEF TFRFFDDNG YPFRCPKPSG AEASQAESSD LESSDLVDQT
EGCQPVYV

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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:

Product Details

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

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) (Warts-like kinase),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 SNAIL 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

Target Details

YAP1 or WWTR1/TAZ. {ECO:0000269|PubMed:10871863, ECO:0000269|PubMed:12853976, ECO:0000269|PubMed:15131260, ECO:0000269|PubMed:18158288, ECO:0000269|PubMed:21952048}.

Molecular Weight: 120.1 kDa

UniProt: [Q9NRM7](#)

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.

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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. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)