

Datasheet for ABIN3096418
YAP1 Protein (AA 1-504) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	YAP1
Protein Characteristics:	AA 1-504
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This YAP1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MDPGQQPPPQ PAPQGQGQPP SQPPQGQGPP SGPGQPAPAA TQAAPQAPPA GHQIVHVRGD SETDLEALFN AVMNPKTANV PQTVPMLRK LPDSFFKPPE PKSHSRQAST DAGTAGALTP QHVAHSSPA SLQLGAVSPG TLPTGVVSG PAATPTAQLH RQSSFEIPDD VPLPAGWEMA KTSSGQRYFL NHIDQTTTWQ DPRKAMLSQM NVTAPTSPPV QQNMMSASG PLPDGWEQAM TQDGEIYYIN HKNKTTSWLD PRLDPRFAMN QRISQSAPVK QPPPLAPQSP QGGVMGGSNS NQQQQMRLQQ LQMEKERLRL KQELLRQAM RNINPSTANS PKCQELALRS QLPTLEQDGG TQNPVSSPGM SQELRTMTTN SSDPFLNSGT YHSRDESTDS GLSMSSYSVP RTPDDFLNSV DEMDTGDTIN QSTLPSQQNR FPDYLEAIPG TNVDLGTLEG DGMNIEGEEL MPSLQEALSS DILNDMESVL AATKLDKESF LTWL</p> <p>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</p>

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.
- 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:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade:

custom-made

Target Details

Target:	YAP1
Alternative Name:	YAP1 (YAP1 Products)
Background:	<p>Transcriptional coactivator YAP1 (Yes-associated protein 1) (Protein yorkie homolog) (Yes-associated protein YAP65 homolog),FUNCTION: Transcriptional regulator which can act both as a coactivator and a corepressor and is the critical downstream regulatory target in the Hippo signaling pathway that plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis (PubMed:17974916, PubMed:18280240, PubMed:18579750, PubMed:21364637, PubMed:30447097). 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 (PubMed:18158288). Plays a key role in tissue tension and 3D tissue shape by regulating cortical actomyosin network formation. Acts via ARHGAP18, a Rho GTPase activating protein that suppresses F-actin polymerization (PubMed:25778702). Plays a key role in controlling cell proliferation in response to cell contact. Phosphorylation of YAP1 by LATS1/2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration (PubMed:18158288). The presence of TEAD transcription factors are required for it to stimulate gene expression, cell growth, anchorage-independent growth, and epithelial mesenchymal transition (EMT) induction (PubMed:18579750). Suppresses ciliogenesis via acting as a transcriptional corepressor of the TEAD4 target genes AURKA and PLK1 (PubMed:25849865). In conjunction with WWTR1, involved in the regulation of TGFB1-dependent SMAD2 and SMAD3 nuclear accumulation (By similarity). {ECO:0000250 UniProtKB:P46938, ECO:0000269 PubMed:17974916, ECO:0000269 PubMed:18158288, ECO:0000269 PubMed:18280240, ECO:0000269 PubMed:18579750, ECO:0000269 PubMed:21364637, ECO:0000269 PubMed:25778702, ECO:0000269 PubMed:25849865, ECO:0000269 PubMed:30447097}., FUNCTION: [Isoform 2]: Activates the C-terminal fragment (CTF) of ERBB4 (isoform 3). {ECO:0000269 PubMed:12807903}., FUNCTION: [Isoform 3]: Activates the C-terminal fragment (CTF) of ERBB4 (isoform 3). {ECO:0000269 PubMed:12807903}.</p>
Molecular Weight:	54.5 kDa
UniProt:	P46937
Pathways:	MAPK Signaling , Stem Cell Maintenance , Regulation of Lipid Metabolism by PPARalpha

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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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