

Datasheet for ABIN3088222

## ACLY Protein (AA 1-1101) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	ACLY
Protein Characteristics:	AA 1-1101
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACLY protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	MSAKAISEQT GKELLYKFIC TTSAIQNRFK YARVTPDTDW ARLLQDHPWL LSQNLVVKPD QLIKRRGKLG LVGVNLTLDG VKSWLKPRLG QEATVGKATG FLKNFLIEPF VPHSQAEFFY VCIYATREGD YVLFHHEGGV DVGDVDAKAQ KLLVGVDEKL NPEDIKKHLL VHAPEDKKEI LASFISGLFN FYEDLYFTYL EINPLVVTKD GVVYVLDLAAK VDATADYICK VKWGDIEFPP PFGREAYPEE AYIADLDAKS GASLKLTLN PKGRIWTMVA GGGASVVYSD TICDLGGVNE LANYGEYSGA PSEQQTYDYA KTILSLMTRE KHPDGKILII GGSIANFTNV AATFKGIVRA IRDYQGPLKE HEVTIFVRRG GPNYQEGLRV MGEVGKTTGI PIHVFGTETH MTAIVGMALG HRPIPNQPPT AAHTANFLN ASGSTSTPAP SRTASFSESR ADEVAPAKKA KPAMPQDSVP SPRSLQGKST TLFSTRHKAI VWGMQTRAVQ GMLDFDYVCS RDEPSVAAMV YPFTGDHKQK FYWGHKEILI PVFKNMADAM RKHPEVDVLI NFASLSAYD STMETMNYAQ IRTIAIIAEG IPEALTRKLI KKADQKGVTI IGPATVGGIK PGCFKIGNTG GMLDNILASK LYRPGSVAYV

SRSGGMSNEL NNIISRTTDG VYEGVAIGGD RYPGSTFMDH VLRYQDTPGV KMIVVLGEIG  
GTEEYKICRG IKEGRLTKPI VCWCIGTCAT MFSSEVQFGH AGACANQASE TAVAKNQALK  
EAGVFPVRSF DELGEIQSV YEDLVANGVI VPAQEVPPPT VPMDYSWARE LGLIRKPASF  
MTSICDERGQ ELIYAGMPIT EVFKEEMGIG GVLGLLWFQK RLPKYSCQFI EMCLMVTADH  
GPAVSGAHNT IICARAGKDL VSSLTSGLLT IGDRFGGALD AAKMFSKAF DSGIIPMEFV  
NKMKEGKLI MGIGHRVKSI NNPDMRVQIL KDYVRQHFP TPLLDYALEV EKITTSKKPN  
LILNVDGLIG VAFVDMLRNC GSFTREEADE YIDIGALNGI FVLGRSMGFI GHYLDQKRLK  
QGLYRHPWDD ISYVLPEHMS M

**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.**

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### 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:

## Product Details

- 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: ACLY

Alternative Name: ACLY ([ACLY Products](#))

Background: ATP-citrate synthase (EC 2.3.3.8) (ATP-citrate (pro-S)-lyase) (ACL) (Citrate cleavage enzyme),FUNCTION: Catalyzes the cleavage of citrate into oxaloacetate and acetyl-CoA, the latter serving as common substrate for de novo cholesterol and fatty acid synthesis.  
{ECO:0000269|PubMed:10653665, ECO:0000269|PubMed:1371749, ECO:0000269|PubMed:19286649, ECO:0000269|PubMed:23932781, ECO:0000269|PubMed:9116495}.

Molecular Weight: 120.8 kDa

UniProt: [P53396](#)

Pathways: [Warburg Effect](#)

## 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