Datasheet for ABIN3136847

# Lipin 1 Protein (LPIN1) (AA 1-924) (Strep Tag)

Go to Product page

## Overview

| | |
|---|---|
| Quantity: | 250 µg |
| Target: | Lipin 1 (LPIN1) |
| Protein Characteristics: | AA 1-924 |
| Origin: | Mouse |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This Lipin 1 protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA |

## Product Details

| | |
|---|---|
| Brand: | AliCE® |
| Sequence: | MNYVGQLAGQ VFVTVKELYK GLNPATLSGC IDIIVIRQPN GSLQCSPFHV RFGKMGVLRS REKVVDIEIN GESVDLHMKL GDNGEAFFVQ ETDNDQEIIP MYLATSPILS EGAARMESQL KRNSVDRIRC LDPTTAAQGL PPSDTPSTGS LGKKRRKRRR KAQLDNLKRD DNVNSSEDED MFPIEMSSDE DTAPMDGSRT LPNDVPPFQD DIPKENFPSI STHPQSASYP SSDREWSPSP SSLVDCQRTP PHLAEGVLSS SCPLQSCHFH ASESPSGSRP STPKSDSELV SKSADRLTPK NNLEMLWLWG ELPQAAKSSS PHKMKESSPL GSRKTPDKMN FQAIHSESSD TFSDQSPTMA RGLLIHQSKA QTEMQFVNEE DLESLGAAAP PSPVAEELKA PYPNTAQSSS KTDSPSRKKD KRSRHLGADG VYLDDLTDMD PEVAALYFPK NGDPGGLPKQ ASDNGARSAN QSPQSVGGSG IDSGVESTSD SLRDLPSIAI SLCGGLSDHR EITKDAFLEQ AVSYQQFADN PAIIDDPNLV VKVGNKYYNW TTAAPLLLAM QAFQKPLPKA TVESIMRDKM PKKGGRWWFS WRGRNATIKE ESKPEQCLTG KGHNTGEQPA QLGLATRIKH ESSSSDEEHA AAKPSGSSHL SLLSNVSYKK |

TLRLTSEQLK SLKLKNGPND VVFSVTTQYQ GTCRCEGTIY LWNWDDKVII SDIDGTITRS DTLGHILPTL GKDWTHQGIA KLYHKVSQNG YKFLYCSARA IGMADMTRGY LHWVNERGTV LPQGPLLLSP SSLFSALHRE VIEKKPEKFK VQCLTDIKNL FFPNTEPFYA AFGNRPADVY SYKQVGVSLN RIFTVNPKGE LVQEHAKTNI SSYVRLCEVV DHVFPLLKRS HSCDFPCSDT FSNFTFWREP LPPFENQDMH SASA

**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.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

## Product Details

| | |
|---|---|
| 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: | Lipin 1 (LPIN1) |
| Alternative Name: | Lpin1 (LPIN1 Products) |
| Background: | Phosphatidate phosphatase LPIN1 (EC 3.1.3.4) (Fatty liver dystrophy protein) (Lipin-1),FUNCTION: Acts as a magnesium-dependent phosphatidate phosphatase enzyme which catalyzes the conversion of phosphatidic acid to diacylglycerol during triglyceride, phosphatidylcholine and phosphatidylethanolamine biosynthesis and therefore controls the metabolism of fatty acids at different levels (PubMed:17158099). Acts also as nuclear transcriptional coactivator for PPARGC1A/PPARA regulatory pathway to modulate lipid metabolism gene expression (PubMed:16950137). Is involved in adipocyte differentiation (PubMed:16049017). {ECO:0000269\|PubMed:16049017, ECO:0000269\|PubMed:16950137, ECO:0000269\|PubMed:17158099}., FUNCTION: [Isoform 1]: Recruited at the mitochondrion outer membrane and is involved in mitochondrial fission by converting phosphatidic acid to diacylglycerol. {ECO:0000269\|PubMed:21397848}. |
| Molecular Weight: | 102.0 kDa |
| UniProt: | Q91ZP3 |
| Pathways: | Monocarboxylic Acid Catabolic Process |

## 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. |
| 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. |

## Application Details

| | |
|---|---|
| | 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.<br>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 |