

Datasheet for ABIN3115666

## GPAT2 Protein (AA 1-795) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	GPAT2
Protein Characteristics:	AA 1-795
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPAT2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MATMLEGRCQ TQPRSSPSGR EASLWSSGFG MKLEAVTPFL GKYPFVGRC CQTCTPKSWE</p> <p>SLFHRSITDL GFCNVILVKE ENTRFRGWLVRRLCYFLWSL EQHIPPCQDV PQKIMESTGV</p> <p>QNLLSGRVPG GTGEGQVPDL VKKEVQRILG HIQAPPRPFL VRLFSWALLR FLNCLFLNVQ</p> <p>LHKGQMKMVQ KAAQAGLPLV LLSTHKTLTD GILLPFMILLS QGLGVLVAV DSRACSPALR</p> <p>ALLRKLGGFL LPPEASLSLD SSEGLLARAV VQAVIEQLLV SGQPLLIFLE EPPGALGPRL</p> <p>SALGQAWVGF VVQAVQGVIV PDALLVPVAV TYDLVPDAPC DIDHASAPLG LWTGALAVLR</p> <p>SLWSRWGCSH RICSRVHLAQ PFSLQEYIVS ARSCWGGRQT LEQLLQPIVL GQCTAVPDTE</p> <p>KEQEWTPITG PLLALKEEDQ LLVRRLSCHV LSASVGSSAV MSTAIMATLL LFKHQKLLGE</p> <p>FSWLTEEILL RGFDFVGFSGQ LRSLLQHSLV LLRAHVALLR IRQGDLLVVP QPGPGLTHLA</p> <p>QLSAELLPVF LSEAVGACAV RGLLAGRVPP QGPWELQGIL LLSQNELYRQ ILLLMHLLPQ</p> <p>DLLLLKPCQS SYCYCQEVLD RLICQGLLVA EETPGSRPAC DTGRQRLSRK LLWKPSGDFT</p>

DSDSDDFGEA DGRYFRLSQQ SHCPDFFLFL CRLLSPLLKA FAQAAAFLRQ GQLPDTELGY  
TEQLFQFLQA TAQEEGIFEC ADPKLAISAV WTRDLGVLQ QTPSPAGPRL HLSPTFASLD  
NQEKLEQFIR QFICS

**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.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression

## Product Details

	System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

## Target Details

Target:	GPAT2
Alternative Name:	GPAT2 ( <a href="#">GPAT2 Products</a> )
Background:	Glycerol-3-phosphate acyltransferase 2, mitochondrial (GPAT-2) (EC 2.3.1.15) (1-acylglycerol-3-phosphate O-acyltransferase GPAT2) (EC 2.3.1.51) (xGPAT1),FUNCTION: Transfers an acyl-group from acyl-ACP to the sn-1 position of glycerol-3-phosphate producing a lysophosphatidic acid (LPA), an essential step for the triacylglycerol (TAG) and glycerophospholipids. In vitro also transfers an acyl-group from acyl-ACP to the LPA producing a phosphatidic acid (PA). Prefers arachidonoyl-CoA as the acyl donor. Required for primary processing step during piRNA biosynthesis. Molecular mechanisms by which it promotes piRNA biosynthesis are unclear and do not involve its acyltransferase activity. {ECO:0000250 UniProtKB:Q14DK4}.
Molecular Weight:	87.8 kDa
UniProt:	<a href="#">Q6NUI2</a>

## 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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>

## Application Details

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Restrictions: For Research Use only

## Handling

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