Datasheet for ABIN3121646

GPAT2 Protein (AA 1-801) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	GPAT2
Protein Characteristics:	AA 1-801
Origin:	Mouse
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:	MDTMLKSNPQ TQQRSNHNGQ ETSLWSSSFG MKMEAITPFL GKYRPFMGRC CQTCTPKSWE SLFHRSIMDL GFCNVILVKE ENTRFRGWLV RRLCYFLWSL EQHIPTSFDA SQKIMENTGV QNLLSGRVPG AAGEGQAPEL VKKEVQRILG HIQTTPRPFL LRLFSWALLW FLNRLFLNVQ LHKGQMKMVQ KAVQEGSPLV FLSTHKSLLD GFLLPFVLFS QGLGVVRVAL DSRTCSPALR ALLRKLGGLF LPPEVNLSLD NSEGILARAV VRATVEELLT SGQPLLIFLE EPPGSPGPRL SALGQAWLGV VIQAVQAGII SDATLVPVAI AYDLVPDAPC NMNHDLAPLG LWTGALAVFR RLCNCWGCNR RVCVRVHLAQ PFSLQEYTIN ARSCWDSRQT LEHLLQPIVL GECSVVPDTE KEQEWTPPTG LLLALKEEDQ LLVRRLSRHV LSASVASSAV MSTAIMATLL LLKHQKGVVL SQLLGEFSWL TEETLLRGFD VGFSGQLRCL AQHTLSLLRA HVVLLRVHQG DLVVVPRPGP GLTHLARLSM ELLPTFLSEA VGACAVRGLL AGRVPPEGPW ELQGIELLSQ NELYRQILLL LHLLPQDLLL PQPCQSSYCY CQEVLDRLIQ CGLLVAEETP GSRPACDTGR QHLSAKLLWK

PSGDFTDSES DDFEEPGGRC FRLSQQSRCP DFFLFLCRLL SPILKAFAQA ATFLHLGQLP DSEVAYSEKL FQFLQACAQE EGIFECADPN LAISAVWTFK DLGVLQEMPS PTGPQLHLSP TFATRDNQDK LEQFIRQFIC S

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 (GPAT2 Products)
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 (PubMed:17013544, PubMed:17689486, PubMed:22905194). In vitro also transfers an acyl-group from acyl-ACP to the LPA producing a phosphatidic acid (PA) (PubMed:22905194). Prefers arachidonoyl-CoA as the acyl donor (PubMed:22905194). Required for primary processing step during piRNA biosynthesis (PubMed:23611983). Molecular mechanisms by which it promotes piRNA biosynthesis are unclear and do not involve its acyltransferase activity (PubMed:23611983). {ECO:0000269|PubMed:17013544, ECO:0000269|PubMed:17689486, ECO:0000269|PubMed:22905194, ECO:0000269|PubMed:23611983}.
Molecular Weight:	89.2 kDa
UniProt:	Q14DK4

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. 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

Application Details

	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. 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