

Datasheet for ABIN3086263

PNPLA1 Protein (AA 1-532) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PNPLA1
Protein Characteristics:	AA 1-532
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PNPLA1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MEEQVFKGDP DTPHSISFSG SGFLSFYQAG AVDALRDLAP RMLETAHRFA GTSAGAVIAA LAICGIEMDE YLRVLNVGVA EVKKSFLGPL SPSCKMVQMM RQFLYRVLPE DSYKVTTGKL HVSLTRLTDG ENVVVSEFTS KEELIEALYC SCFVPVYCGI IPPTYRGVRY IDGGFTGMQP CAFWTDAITI STFSGQQDIC PRDCAIFHD FRMFNCSFQF SLENIARMTH ALFPPDLVIL HDYYYRGYED AVLYLRRLNA VYLNSSSKRV IFPRVEVYCQ IELALGNECP ERSQPSLRAR QASLEGATQP HKEWVPKGDG RGSHPVPSVQ PVQTLFTCE SPVSAPVSPL EQPPAQPLAS STPLSLSGMP PVSFPAVHKP PSSTPGSSLP TPPPGLSPLS PQQVQPSGS PARSLHSQAP TSPRPSLGPS TVGAPQTLPR SLSAFPAQP PVEELGQEQP QAVALLVSSK PKSAVPLVHV KETVSKPYVT ESPAEDSNWV NKVFKKNKQK TSGTRKGFPR HSGSKKPSSK VQ</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:	PNPLA1
Alternative Name:	PNPLA1 (PNPLA1 Products)
Background:	<p>Omega-hydroxyceramide transacylase (EC 2.3.1.296) (Patatin-like phospholipase domain-containing protein 1),FUNCTION: Omega-hydroxyceramide transacylase involved in the synthesis of omega-O-acylceramides (esterified omega-hydroxyacyl-sphingosine, EOS), which are extremely hydrophobic lipids involved in skin barrier formation (PubMed:27751867, PubMed:28248318). Catalyzes the last step of the synthesis of omega-O-acylceramides by transferring linoleic acid from triglycerides to an omega-hydroxyceramide (PubMed:27751867, PubMed:28248318). Omega-O-acylceramides, are required for the biogenesis of lipid lamellae in the stratum corneum and the formation of the cornified lipid envelope which are essential for the epidermis barrier function (PubMed:22246504, PubMed:27751867, PubMed:28248318). These lipids also play a role in keratinocyte differentiation (By similarity). May also act on omega-hydroxylated ultra-long chain fatty acids (omega-OH ULCFA) and acylglucosylceramides (GlcEOS) (By similarity). {ECO:0000250 UniProtKB:Q3V1D5, ECO:0000269 PubMed:22246504, ECO:0000269 PubMed:27751867, ECO:0000269 PubMed:28248318}.</p>
Molecular Weight:	57.9 kDa
UniProt:	Q8N8W4

Application Details

Application Notes:	<p>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.</p>
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

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