Datasheet for ABIN3121263

LYPLA1 Protein (AA 1-230) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	LYPLA1
Protein Characteristics:	AA 1-230
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This LYPLA1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MCGNNMSAPM PAVVPAARKA TAAVIFLHGL GDTGHGWAEA FAGIKSPHIK YICPHAPVMP VTLNMNMAMP SWFDIVGLSP DSQEDESGIK QAAETVKALI DQEVKNGIPS NRIILGGFSQ GGALSLYTAL TTQQKLAGVT ALSCWLPLRA SFSQGPINSA NRDISVLQCH GDCDPLVPLM FGSLTVERLK ALINPANVTF KIYEGMMHSS CQQEMMDVKH FIDKLLPPID **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 System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	LYPLA1
Alternative Name:	Lypla1 (LYPLA1 Products)
Background:	Acyl-protein thioesterase 1 (APT-1) (EC 3.1.2.-) (Lysophospholipase 1) (Lysophospholipase I)

Target Details

	(LPL-I) (LysoPLA I) (Palmitoyl-protein hydrolase) (EC 3.1.2.22),FUNCTION: Acts as an acyl-protein thioesterase (By similarity). Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS (By similarity). Acts as a palmitoyl thioesterase that catalyzes depalmitoylation of proteins, such as ADRB2, KCNMA1 and SQSTM1 (By similarity). Acts as a negative regulator of autophagy by mediating palmitoylation of SQSTM1, decreasing affinity between SQSTM1 and ATG8 proteins and recruitment of ubiquitinated cargo proteins to autophagosomes (By similarity). Acts as a lysophospholipase and hydrolyzes lysophosphatidylcholine (lyso-PC) (By similarity). Also hydrolyzes lysophosphatidylethanolamine (lyso-PE), lysophosphatidylinositol (lyso-PI) and lysophosphatidylserine (lyso-PS) (PubMed:9139730). Has much higher thioesterase activity than lysophospholipase activity (By similarity). Contributes to the production of lysophosphatidic acid (LPA) during blood coagulation by recognizing and cleaving plasma phospholipids to generate lysophospholipids which in turn act as substrates for ENPP2 to produce LPA (By similarity). {ECO:0000250|UniProtKB:O75608, ECO:0000250|UniProtKB:P70470, ECO:0000269|PubMed:9139730}.
Molecular Weight:	24.7 kDa
UniProt:	P97823

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 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