PLAA Protein (AA 1-794) (Strep Tag)

Overview

Quantity:	250 μg
Target:	PLAA
Protein Characteristics:	AA 1-794
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLAA protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MASGASRYRL SCSLPGHELD VRGLVCCLYP PGAFVSVSRD RTTRLWAPDS PNRGFTEMHC MSGHSNFVSC VCIIPSSDIY PHGLIATGGN DHNICIFSLD SPMPLYILKG HKDTVCSLSS GKFGTLLSGS WDTTAKVWLN DKCMMTLQGH TAAVWAVKIL PEQGLMLTGS ADKTIKLWKA GRCERTFLGH EDCVRGLAIL SETEFLSCAN DASIRRWQIT GECLEVYFGH TNYIYSISVF PNSKDFVTTA EDRSLRIWKH GECAQTIRLP AQSIWCCCVL ENGDIVVGAS DGIIRVFTES EERTASAEEI KAFERELSQA TIDSKTGDLG DINAEQLPGR EHLSEPGTRE GQTRLIRDGE RVEAYQWSVS DGRWIKIGDV VGSSGANQQT SGKVLYEGKE FDYVFSIDVN EGGPSYKLPY NVSDDPWLVA YNFLQKNDLN PMFLDQVAKF IIDNTKGQTL GLGNTSFSDP FTGGGRYVPG TSGPSNTVQT ADPFTGAGRY MPGSAGMDTT MTGVDPFTGN SAYRSAASKT VNIYFPKKEA LTFDQANPTQ ILGKLKELNG TAPEEKKLTE DDLVLLEKIL SLICNNSSEK PTAQQLQILW KAINWPEDIV FPALDILRLS IKHPNVNENF CNEKGDQFSS HLINLLNPKG KPANQLLALR

TFCNCFVSQA GQKLMMSQRE SLMSHAIELK SGSNKNIHIA LATLTLNYSV CFHKDHNIEG

KAQCLSVIST ILEVVQDLEA TFRLLVALGT LISDDSNAIQ LAKSLGVDSQ IKKYVSVSEP

AKVSECCRLV LHLL

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: |

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:	PLAA
Alternative Name:	Plaa (PLAA Products)
Background:	Phospholipase A-2-activating protein (PLA2P) (PLAP),FUNCTION: Plays a role in protein ubiquitination, sorting and degradation through its association with VCP (By similarity). Involved in ubiquitin-mediated membrane proteins trafficking to late endosomes in an ESCRT-dependent manner, and hence plays a role in synaptic vesicle recycling (PubMed:28413018). May play a role in macroautophagy, regulating for instance the clearance of damaged lysosomes (By similarity). Plays a role in cerebellar Purkinje cell development (PubMed:28413018). Positively regulates cytosolic and calcium-independent phospholipase A2 activities in a tumor necrosis factor alpha (TNF-alpha)- or lipopolysaccharide (LPS)-dependent manner, and hence prostaglandin E2 biosynthesis (PubMed:28007986). {ECO:0000250|UniProtKB:Q9Y263, ECO:0000269|PubMed:28007986, ECO:0000269|PubMed:28413018}.
Molecular Weight:	87.2 kDa
UniProt:	P27612

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

Application Details

	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