Datasheet for ABIN3109780

PLSCR1 Protein (AA 1-318) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	PLSCR1
Protein Characteristics:	AA 1-318
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PLSCR1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MDKQNSQMNA SHPETNLPVG YPPQYPPTAF QGPPGYSGYP GPQVSYPPPP AGHSGPGPAG FPVPNQPVYN QPVYNQPVGA AGVPWMPAPQ PPLNCPPGLE YLSQIDQILI HQQIELLEVL TGFETNNKYE IKNSFGQRVY FAAEDTDCCT RNCCGPSRPF TLRIIDNMGQ EVITLERPLR CSSCCCPCCL QEIEIQAPPG VPIGYVIQTW HPCLPKFTIQ NEKREDVLKI SGPCVVCSCC GDVDFEIKSL DEQCVVGKIS KHWTGILREA FTDADNFGIQ FPLDLDVKMK AVMIGACFLI DFMFFESTGS QEQKSGVW **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:

Product Details

- 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:	PLSCR1

Target Details

Alternative Name:	PLSCR1 (PLSCR1 Products)
Background:	Phospholipid scramblase 1 (PL scramblase 1) (Ca(2+)-dependent phospholipid scramblase 1) (Erythrocyte phospholipid scramblase) (Mg(2+)-dependent nuclease) (EC 3.1.-.-) (MmTRA1b),FUNCTION: Catalyzes calcium-induced ATP-independent rapid bidirectional and non-specific movement of phospholipids (lipid scrambling or lipid flip-flop) between the inner and outer leaflet of the plasma membrane resulting in collapse of the phospholipid asymmetry which leads to phosphatidylserine externalization on the cell surface (PubMed:9218461, PubMed:8663431, PubMed:10770950, PubMed:9572851, PubMed:9485382, PubMed:18629440, PubMed:23590222, PubMed:24648509, PubMed:24343571, PubMed:32110987, PubMed:23659204, PubMed:29748552). Mediates calcium-dependent phosphatidylserine externalization and apoptosis in neurons via its association with TRPC5 (By similarity). Also exhibits magnesium-dependent nuclease activity against double-stranded DNA and RNA but not single-stranded DNA and can enhance DNA decatenation mediated by TOP2A (PubMed:27206388, PubMed:17567603). Negatively regulates FcR-mediated phagocytosis in differentiated macrophages (PubMed:26745724). May contribute to cytokine-regulated cell proliferation and differentiation (By similarity). May play a role in the antiviral response of interferon (IFN) by amplifying and enhancing the IFN response through increased expression of select subset of potent antiviral genes (PubMed:15308695). Inhibits the functions of viral transactivators, including human T-cell leukemia virus (HTLV)-1 protein Tax, human immunodeficiency virus (HIV)-1 Tat, human hepatitis B virus (HBV) HBx, Epstein-Barr virus (EBV) BZLF1 and human cytomegalovirus IE1 and IE2 proteins through direct interactions (PubMed:22789739, PubMed:31434743, PubMed:25365352, PubMed:23501106, PubMed:35138119). Mediates also the inhibition of influenza virus infection by preventing nuclear import of the viral nucleoprotein/NP (PubMed:29352288, PubMed:35595813). Plays a crucial role as a defense factor against SARS-CoV-2 independently of its scramblase activity by directly targeting nascent viral vesicles to prevent virus-membrane fusion and the release of viral RNA into the host-cell cytosol (PubMed:37438530). {ECO:0000250|UniProtKB:Q9JJ00, ECO:0000269|PubMed:10770950, ECO:0000269|PubMed:15308695, ECO:0000269|PubMed:17567603, ECO:0000269|PubMed:18629440, ECO:0000269|PubMed:21806988, ECO:0000269|PubMed:22789739, ECO:0000269|PubMed:23501106, ECO:0000269|PubMed:23590222, ECO:0000269|PubMed:23659204, ECO:0000269|PubMed:24343571, ECO:0000269|PubMed:24648509, ECO:0000269|PubMed:25365352, ECO:0000269|PubMed:26745724, ECO:0000269|PubMed:27206388, ECO:0000269|PubMed:29748552, ECO:0000269|PubMed:31434743,

Target Details

	ECO:0000269|PubMed:32110987, ECO:0000269|PubMed:35138119, ECO:0000269|PubMed:37438530, ECO:0000269|PubMed:8663431, ECO:0000269|PubMed:9218461, ECO:0000269|PubMed:9485382, ECO:0000269|PubMed:9572851}., FUNCTION: (Microbial infection) Acts as an attachment receptor for HCV. {ECO:0000269|PubMed:21806988}.
Molecular Weight:	35.0 kDa
UniProt:	O15162
Pathways:	Cellular Response to Molecule of Bacterial Origin

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.

Handling

Expiry Date:	12 months