Datasheet for ABIN3119346

ATP8A1 Protein (AA 1-1164) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ATP8A1
Protein Characteristics:	AA 1-1164
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP8A1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MPTMRRTVSE IRSRAEGYEK TDDVSEKTSL ADQEEVRTIF INQPQLTKFC NNHVSTAKYN IITFLPRFLY SQFRRAANSF FLFIALLQQI PDVSPTGRYT TLVPLLFILA VAAIKEIIED IKRHKADNAV NKKQTQVLRN GAWEIVHWEK VAVGEIVKVT NGEHLPADLI SLSSSEPQAM CYIETSNLDG ETNLKIRQGL PATSDIKDVD SLMRISGRIE CESPNRHLYD FVGNIRLDGH GTVPLGADQI LLRGAQLRNT QWVHGIVVYT GHDTKLMQNS TSPPLKLSNV ERITNVQILI LFCILIAMSL VCSVGSAIWN RRHSGKDWYL NLNYGGASNF GLNFLTFIIL FNNLIPISLL VTLEVVKFTQ AYFINWDLDM HYEPTDTAAM ARTSNLNEEL GQVKYIFSDK TGTLTCNVMQ FKKCTIAGVA YGHVPEPEDY GCSPDEWQNS QFGDEKTFSD SSLLENLQNN HPTAPIICEF LTMMAVCHTA VPEREGDKII YQAASPDEGA LVRAAKQLNF VFTGRTPDSV IIDSLGQEER YELLNVLEFT SARKRMSVIV RTPSGKLRLY CKGADTVIYD RLAETSKYKE ITLKHLEQFA TEGLRTLCFA VAEISESDFQ EWRAVYQRAS TSVQNRLLKL EESYELIEKN LQLLGATAIE DKLQDQVPET

IETLMKADIK IWILTGDKQE TAINIGHSCK LLKKNMGMIV INEGSLDGTR ETLSRHCTTL GDALRKENDF ALIIDGKTLK YALTFGVRQY FLDLALSCKA VICCRVSPLQ KSEVVEMVKK QVKVVTLAIG DGANDVSMIQ TAHVGVGISG NEGLQAANSS DYSIAQFKYL KNLLMIHGAW NYNRVSKCIL YCFYKNIVLY IIEIWFAFVN GFSGQILFER WCIGLYNVMF TAMPPLTLGI FERSCRKENM LKYPELYKTS QNALDFNTKV FWVHCLNGLF HSVILFWFPL KALQYGTAFG NGKTSDYLLL GNFVYTFVVI TVCLKAGLET SYWTWFSHIA IWGSIALWVV FFGIYSSLWP AIPMAPDMSG EAAMLFSSGV FWMGLLFIPV ASLLLDVVYK VIKRTAFKTL VDEVQELEAK SQDPGAVVLG KSLTERAQLL KNVFKKNHVN LYRSESLQQN LLHGYAFSQD ENGIVSQSEV IRAYDTTKQR PDEW

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!

Product Details

	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:	ATP8A1
Alternative Name:	ATP8A1 (ATP8A1 Products)
Background:	Phospholipid-transporting ATPase IA (EC 7.6.2.1) (ATPase class I type 8A member 1) (Chromaffin granule ATPase II) (P4-ATPase flippase complex alpha subunit ATP8A1),FUNCTION: Catalytic component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids from the outer to the inner leaflet of various membranes and ensures the maintenance of asymmetric distribution of phospholipids (PubMed:31416931). Phospholipid translocation seems also to be implicated in vesicle formation and in uptake of lipid signaling molecules. In vitro, its ATPase activity is selectively and stereospecifically stimulated by phosphatidylserine (PS) (PubMed:31416931). The flippase complex ATP8A1:TMEM30A seems to play a role in regulation of cell migration probably involving flippase-mediated translocation of phosphatidylethanolamine (PE) at the cell membrane (By similarity). Acts as aminophospholipid translocase at the cell membrane in neuronal cells (By similarity). {ECO:0000250|UniProtKB:P70704, ECO:0000269|PubMed:31416931}.
Molecular Weight:	131.4 kDa
UniProt:	Q9Y2Q0

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

Application Details

	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