Datasheet for ABIN3114231

ATP11A Protein (AA 1-1134) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ATP11A
Protein Characteristics:	AA 1-1134
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP11A protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MDCSLVRTLV HRYCAGEENW VDSRTIYVGH REPPPGAEAY IPQRYPDNRI VSSKYTFWNF IPKNLFEQFR RVANFYFLII FLVQLIIDTP TSPVTSGLPL FFVITVTAIK QGYEDWLRHK ADNAMNQCPV HFIQHGKLVR KQSRKLRVGD IVMVKEDETF PCDLIFLSSN RGDGTCHVTT ASLDGESSHK THYAVQDTKG FHTEEDIGGL HATIECEQPQ PDLYKFVGRI NVYSDLNDPV VRPLGSENLL LRGATLKNTE KIFGVAIYTG METKMALNYQ SKSQKRSAVE KSMNAFLIVY LCILISKALI NTVLKYMWQS EPFRDEPWYN QKTESERQRN LFLKAFTDFL AFMVLFNYII PVSMYVTVEM QKFLGSYFIT WDEDMFDEET GEGPLVNTSD LNEELGQVEY IFTDKTGTLT ENNMEFKECC IEGHVYVPHV ICNGQVLPES SGIDMIDSSP SVNGREREEL FFRALCLCHT VQVKDDDSVD GPRKSPDGGK SCVYISSSPD EVALVEGVQR LGFTYLRLKD NYMEILNREN HIERFELLEI LSFDSVRRRM SVIVKSATGE IYLFCKGADS SIFPRVIEGK VDQIRARVER NAVEGLRTLC VAYKRLIQEE YEGICKLLQA AKVALQDREK KLAEAYEQIE KDLTLLGATA

VEDRLQEKAA DTIEALQKAG IKVWVLTGDK METAAATCYA CKLFRRNTQL LELTTKRIEE QSLHDVLFEL SKTVLRHSGS LTRDNLSGLS ADMQDYGLII DGAALSLIMK PREDGSSGNY RELFLEICRS CSAVLCCRMA PLQKAQIVKL IKFSKEHPIT LAIGDGANDV SMILEAHVGI GVIGKEGRQA ARNSDYAIPK FKHLKKMLLV HGHFYYIRIS ELVQYFFYKN VCFIFPQFLY QFFCGFSQQT LYDTAYLTLY NISFTSLPIL LYSLMEQHVG IDVLKRDPTL YRDVAKNALL RWRVFIYWTL LGLFDALVFF FGAYFVFENT TVTSNGQIFG NWTFGTLVFT VMVFTVTLKL ALDTHYWTWI NHFVIWGSLL FYVVFSLLWG GVIWPFLNYQ RMYYVFIQML SSGPAWLAIV LLVTISLLPD VLKKVLCRQL WPTATERVQT KSQCLSVEQS TIFMLSQTSS SLSF

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:

Product Details

- 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:	ATP11A
Alternative Name:	ATP11A (ATP11A Products)
Background:	Phospholipid-transporting ATPase IH (EC 7.6.2.1) (ATPase IS) (ATPase class VI type 11A) (P4-ATPase flippase complex alpha subunit ATP11A),FUNCTION: Catalytic component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids, phosphatidylserines (PS) and phosphatidylethanolamines (PE), from the outer to the inner leaflet of the plasma membrane (PubMed:25315773, PubMed:25947375, PubMed:26567335, PubMed:29799007, PubMed:30018401, PubMed:36300302). Does not show flippase activity toward phosphatidylcholine (PC) (PubMed:34403372). Contributes to the maintenance of membrane lipid asymmetry with a specific role in morphogenesis of muscle cells. In myoblasts, mediates PS enrichment at the inner leaflet of plasma membrane, triggering PIEZO1-dependent Ca2+ influx and Rho GTPases signal transduction, subsequently leading to the assembly of cortical actomyosin fibers and myotube formation (PubMed:29799007). May be involved in the uptake of farnesyltransferase inhibitor drugs, such as lonafarnib. {ECO:0000269|PubMed:15860663, ECO:0000269|PubMed:25315773, ECO:0000269|PubMed:25947375, ECO:0000269|PubMed:26567335, ECO:0000269|PubMed:29799007, ECO:0000269|PubMed:30018401, ECO:0000269|PubMed:34403372, ECO:0000269|PubMed:36300302, ECO:0000305}.
Molecular Weight:	129.8 kDa
UniProt:	P98196

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