Datasheet for ABIN3075317

ATP6V1A Protein (AA 1-617) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ATP6V1A
Protein Characteristics:	AA 1-617
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP6V1A protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MDFSKLPKIL DEDKESTFGY VHGVSGPVVT ACDMAGAAMY ELVRVGHSEL VGEIIRLEGD MATIQVYEET SGVSVGDPVL RTGKPLSVEL GPGIMGAIFD GIQRPLSDIS SQTQSIYIPR GVNVSALSRD IKWDFTPCKN LRVGSHITGG DIYGIVSENS LIKHKIMLPP RNRGTVTYIA PPGNYDTSDV VLELEFEGVK EKFTMVQVWP VRQVRPVTEK LPANHPLLTG QRVLDALFPC VQGGTTAIPG AFGCGKTVIS QSLSKYSNSD VIIYVGCGER GNEMSEVLRD FPELTMEVDG KVESIMKRTA LVANTSNMPV AAREASIYTG ITLSEYFRDM GYHVSMMADS TSRWAEALRE ISGRLAEMPA DSGYPAYLGA RLASFYERAG RVKCLGNPER EGSVSIVGAV SPPGGDFSDP VTSATLGIVQ VFWGLDKKLA QRKHFPSVNW LISYSKYMRA LDEYYDKHFT EFVPLRTKAK EILQEEEDLA EIVQLVGKAS LAETDKITLE VAKLIKDDFL QQNGYTPYDR FCPFYKTVGM LSNMIAFYDM ARRAVETTAQ SDNKITWSII REHMGDILYK LSSMKFKDPL KDGEAKIKSD YAQLLEDMQN AFRSLED

Product Details

	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).

Product Details

Grade:	custom-made

Target Details

Target:	ATP6V1A
Alternative Name:	ATP6V1A (ATP6V1A Products)
Background:	V-type proton ATPase catalytic subunit A (V-ATPase subunit A) (EC 7.1.2.2) (V-ATPase 69 kDa subunit) (Vacuolar ATPase isoform VA68) (Vacuolar proton pump subunit alpha),FUNCTION: Catalytic subunit of the V1 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit enzyme composed of a peripheral complex (V1) that hydrolyzes ATP and a membrane integral complex (V0) that translocates protons (PubMed:8463241). V-ATPase is responsible for acidifying and maintaining the pH of intracellular compartments and in some cell types, is targeted to the plasma membrane, where it is responsible for acidifying the extracellular environment (PubMed:32001091). In aerobic conditions, involved in intracellular iron homeostasis, thus triggering the activity of Fe(2+) prolyl hydroxylase (PHD) enzymes, and leading to HIF1A hydroxylation and subsequent proteasomal degradation (PubMed:28296633). May play a role in neurite development and synaptic connectivity (PubMed:29668857). {ECO:0000250|UniProtKB:P50516, ECO:0000269|PubMed:28296633, ECO:0000269|PubMed:29668857, ECO:0000269|PubMed:8463241, ECO:0000303|PubMed:32001091}., FUNCTION: (Microbial infection) Plays an important role in virion uncoating during Rabies virus replication after membrane fusion. Specifically, participates in the dissociation of incoming viral matrix M proteins uncoating through direct interaction. {ECO:0000269|PubMed:33208464}.
Molecular Weight:	68.3 kDa
UniProt:	P38606
Pathways:	Transition Metal Ion Homeostasis, Proton Transport, SARS-CoV-2 Protein Interactome

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

Application Details

	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