Datasheet for ABIN3075353

ATP6V1B1 Protein (AA 1-513) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	ATP6V1B1
Protein Characteristics:	AA 1-513
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP6V1B1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MAMEIDSRPG GLPGSSCNLG AAREHMQAVT RNYITHPRVT YRTVCSVNGP LVVLDRVKFA QYAEIVHFTL PDGTQRSGQV LEVAGTKAIV QVFEGTSGID ARKTTCEFTG DILRTPVSED MLGRVFNGSG KPIDKGPVVM AEDFLDINGQ PINPHSRIYP EEMIQTGISP IDVMNSIARG QKIPIFSAAG LPHNEIAAQI CRQAGLVKKS KAVLDYHDDN FAIVFAAMGV NMETARFFKS DFEQNGTMGN VCLFLNLAND PTIERIITPR LALTTAEFLA YQCEKHVLVI LTDMSSYAEA LREVSAAREE VPGRRGFPGY MYTDLATIYE RAGRVEGRGG SITQIPILTM PNDDITHPIP DLTGFITEGQ IYVDRQLHNR QIYPPINVLP SLSRLMKSAI GEGMTRKDHG DVSNQLYACY AIGKDVQAMK AVVGEEALTS EDLLYLEFLQ KFEKNFINQG PYENRSVFES LDLGWKLLRI FPKEMLKRIP QAVIDEFYSR EGALQDLAPD TAL **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).
Grade:	custom-made

Target Details

Target:	ATP6V1B1
Alternative Name:	ATP6V1B1 (ATP6V1B1 Products)
Background:	V-type proton ATPase subunit B, kidney isoform (V-ATPase subunit B 1) (Endomembrane proton pump 58 kDa subunit) (Vacuolar proton pump subunit B 1),FUNCTION: Non-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:16769747). 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). Essential for the proper assembly and activity of V-ATPase (PubMed:16769747). In renal intercalated cells, mediates secretion of protons (H+) into the urine thereby ensuring correct urinary acidification (PubMed:16769747). Required for optimal olfactory function by mediating the acidification of the nasal olfactory epithelium (By similarity). {ECO:0000250|UniProtKB:Q91YH6, ECO:0000269|PubMed:16769747, ECO:0000303|PubMed:32001091}.
Molecular Weight:	56.8 kDa
UniProt:	P15313
Pathways:	Sensory Perception of Sound, Transition Metal Ion Homeostasis, Proton Transport

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!

Application Details

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