

## Datasheet for ABIN3115108

# ATP2B3 Protein (AA 1-1220) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	ATP2B3
Protein Characteristics:	AA 1-1220
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP2B3 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Brand:	AliCE®
Sequence:	MGDMANSSIE FHPKPQQQRD VPQAGGFGCT LAELRTLMEL RGAEALQKIE EAYGDVSGLC
	RRLKTSPTEG LADNTNDLEK RRQIYGQNFI PPKQPKTFLQ LVWEALQDVT LIILEVAAIV
	SLGLSFYAPP GEESEACGNV SGGAEDEGEA EAGWIEGAAI LLSVICVVLV TAFNDWSKEK
	QFRGLQSRIE QEQKFTVIRN GQLLQVPVAA LVVGDIAQVK YGDLLPADGV LIQANDLKID
	ESSLTGESDH VRKSADKDPM LLSGTHVMEG SGRMVVTAVG VNSQTGIIFT LLGAGGEEEE
	KKDKKGKQQD GAMESSQTKA KKQDGAVAME MQPLKSAEGG EMEEREKKKA NAPKKEKSVL
	QGKLTKLAVQ IGKAGLVMSA ITVIILVLYF VIETFVVEGR TWLAECTPVY VQYFVKFFII
	GVTVLVVAVP EGLPLAVTIS LAYSVKKMMK DNNLVRHLDA CETMGNATAI CSDKTGTLTT
	NRMTVVQSYL GDTHYKEIPA PSALTPKILD LLVHAISINS AYTTKILPPE KEGALPRQVG
	NKTECALLGF VLDLKRDFQP VREQIPEDKL YKVYTFNSVR KSMSTVIRMP DGGFRLFSKG
	ASEILLKKCT NILNSNGELR GFRPRDRDDM VRKIIEPMAC DGLRTICIAY RDFSAGQEPD

WDNENEVVGD LTCIAVVGIE DPVRPEVPEA IRKCQRAGIT VRMVTGDNIN TARAIAAKCG
IIQPGEDFLC LEGKEFNRRI RNEKGEIEQE RLDKVWPKLR VLARSSPTDK HTLVKGIIDS
TTGEQRQVVA VTGDGTNDGP ALKKADVGFA MGIAGTDVAK EASDIILTDD NFTSIVKAVM
WGRNVYDSIS KFLQFQLTVN VVAVIVAFTG ACITQDSPLK AVQMLWVNLI MDTFASLALA
TEPPTESLLL RKPYGRDKPL ISRTMMKNIL GHAVYQLAII FTLLFVGELF FDIDSGRNAP
LHSPPSEHYT IIFNTFVMMQ LFNEINARKI HGERNVFDGI FSNPIFCTIV LGTFGIQIVI
VQFGGKPFSC SPLSTEQWLW CLFVGVGELV WGQVIATIPT SQLKCLKEAG HGPGKDEMTD
EELAEGEEEI DHAERELRRG QILWFRGLNR IQTQIRVVKA FRSSLYEGLE KPESKTSIHN
FMATPEFLIN DYTHNIPLID DTDVDENEER LRAPPPPSPN QNNNAIDSGI YLTTHVTKSA
TSSVFSSSPG SPLHSVETSL

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 posttranslational 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:	ATP2B3
Alternative Name:	ATP2B3 (ATP2B3 Products)
Background:	Plasma membrane calcium-transporting ATPase 3 (PMCA3) (EC 7.2.2.10) (Plasma membrane
	calcium ATPase isoform 3) (Plasma membrane calcium pump isoform 3),FUNCTION: ATP-
	driven Ca(2+) ion pump involved in the maintenance of basal intracellular Ca(2+) levels at the
	presynaptic terminals (PubMed:25953895, PubMed:27035656, PubMed:22912398,
	PubMed:18029012). Uses ATP as an energy source to transport cytosolic Ca(2+) ions across
	the plasma membrane to the extracellular compartment (PubMed:25953895,
	PubMed:27035656). May counter-transport protons, but the mechanism and the stoichiometry
	of this Ca(2+)/H(+) exchange remains to be established (By similarity).
	{ECO:0000250 UniProtKB:Q64568, ECO:0000269 PubMed:18029012,
	ECO:0000269 PubMed:22912398, ECO:0000269 PubMed:25953895,
	ECO:0000269 PubMed:27035656}.
Molecular Weight:	134.2 kDa
UniProt:	Q16720
Pathways:	Ribonucleoside Biosynthetic Process
Application Dataila	

# **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**

Expiry Date:

12 months

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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.