Datasheet for ABIN3113480

ATP7B Protein (AA 1-1465) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	ATP7B
Protein Characteristics:	AA 1-1465
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP7B protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MPEQERQITA REGASRKILS KLSLPTRAWE PAMKKSFAFD NVGYEGGLDG LGPSSQVATS TVRILGMTCQ SCVKSIEDRI SNLKGIISMK VSLEQGSATV KYVPSVVCLQ QVCHQIGDMG FEASIAEGKA ASWPSRSLPA QEAVVKLRVE GMTCQSCVSS IEGKVRKLQG VVRVKVSLSN QEAVITYQPY LIQPEDLRDH VNDMGFEAAI KSKVAPLSLG PIDIERLQST NPKRPLSSAN QNFNNSETLG HQGSHVVTLQ LRIDGMHCKS CVLNIEENIG QLLGVQSIQV SLENKTAQVK YDPSCTSPVA LQRAIEALPP GNFKVSLPDG AEGSGTDHRS SSSHSPGSPP RNQVQGTCST TLIAIAGMTC ASCVHSIEGM ISQLEGVQQI SVSLAEGTAT VLYNPSVISP EELRAAIEDM GFEASVVSES CSTNPLGNHS AGNSMVQTTD GTPTSVQEVA PHTGRLPANH APDILAKSPQ STRAVAPQKC FLQIKGMTCA SCVSNIERNL QKEAGVLSVL VALMAGKAEI KYDPEVIQPL EIAQFIQDLG FEAAVMEDYA GSDGNIELTI TGMTCASCVH NIESKLTRTN GITYASVALA TSKALVKFDP EIIGPRDIIK IIEEIGFHAS LAQRNPNAHH LDHKMEIKQW KKSFLCSLVF

GIPVMALMIY MLIPSNEPHQ SMVLDHNIIP GLSILNLIFF ILCTFVQLLG GWYFYVQAYK SLRHRSANMD VLIVLATSIA YVYSLVILVV AVAEKAERSP VTFFDTPPML FVFIALGRWL EHLAKSKTSE ALAKLMSLQA TEATVVTLGE DNLIIREEQV PMELVQRGDI VKVVPGGKFP VDGKVLEGNT MADESLITGE AMPVTKKPGS TVIAGSINAH GSVLIKATHV GNDTTLAQIV KLVEEAQMSK APIQQLADRF SGYFVPFIII MSTLTLVVWI VIGFIDFGVV QRYFPNPNKH ISQTEVIIRF AFQTSITVLC IACPCSLGLA TPTAVMVGTG VAAQNGILIK GGKPLEMAHK IKTVMFDKTG TITHGVPRVM RVLLLGDVAT LPLRKVLAVV GTAEASSEHP LGVAVTKYCK EELGTETLGY CTDFQAVPGC GIGCKVSNVE GILAHSERPL SAPASHLNEA GSLPAEKDAV PQTFSVLIGN REWLRRNGLT ISSDVSDAMT DHEMKGQTAI LVAIDGVLCG MIAIADAVKQ EAALAVHTLQ SMGVDVVLIT GDNRKTARAI ATQVGINKVF AEVLPSHKVA KVQELQNKGK KVAMVGDGVN DSPALAQADM GVAIGTGTDV AIEAADVVLI RNDLLDVVAS IHLSKRTVRR IRINLVLALI YNLVGIPIAA GVFMPIGIVL QPWMGSAAMA ASSVSVVLSS LQLKCYKKPD LERYEAQAHG HMKPLTASQV SVHIGMDDRW RDSPRATPWD QVSYVSQVSL SSLTSDKPSR HSAAADDDGD KWSLLLNGRD EEQYI

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

Product Details

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:	ATP7B
Alternative Name:	ATP7B (ATP7B Products)
Background:	Copper-transporting ATPase 2 (EC 7.2.2.8) (Copper pump 2) (Wilson disease-associated protein) [Cleaved into: WND/140 kDa],FUNCTION: Copper ion transmembrane transporter involved in the export of copper out of the cells. It is involved in copper homeostasis in the liver, where it ensures the efflux of copper from hepatocytes into the bile in response to copper overload. {ECO:0000269|PubMed:18203200, ECO:0000269|PubMed:22240481, ECO:0000269|PubMed:24706876, ECO:0000269|PubMed:26004889}.
Molecular Weight:	157.3 kDa
UniProt:	P35670
Pathways:	Transition Metal Ion Homeostasis, Ribonucleoside Biosynthetic Process

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.

Application Details

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