

Datasheet for ABIN3137155
ATP13A1 Protein (AA 1-1200) (Strep Tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	ATP13A1
Protein Characteristics:	AA 1-1200
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATP13A1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MAVVGNAVPC GARPGGARDN GSPQPGSRLR PGLAAGPALI ANGDELVAHV WPYRRLLALLR RLTVLPFAGL LYPAWLGAAA SGCWGWGSSW TQIPEAALLA LATICLAHAL TVLSGHWVSVH AHCALTCTPE YDPNKVTFVK VVPTPNNGST ELVALHRDKG EDGLEVLSE FQKIKYSYDA LEKKQFLPVA FPGVNAFSYY QSNRGFQEDS EIRAAEKKFG SNKAEMVVPD FSELFKERAT APFFVFQVFC VGLWCLDEYW YYSVFTLSML VAFEASLVQQ QMRNMSEIRK MGNKPHMIQV YRSRKWRPVA SDDIVPGDIV SIGRSPQENL VPCDVLLLRG RCIVDEAMLT GESVPQMKEP IEDLSPDRVL DLQADARLHV IFGGTKVVQH IPPQKATSGL KPDVNGCVAF VLRTGFNTSQ GRLLRITLFG VKRVTANNLE TFIFILFLV FAIAAAAYVW VEGTKDPSRN RYKLFLECTL ILTSVVPPEL PIELSLAVNT SLIALAKLYM YCTEPFRIPF AGKVEVCCFD KTGTLTSDSL VVRGVAGLRD GKEVTPVSSI PIETHRALAS CHSLMQLDDG TLVGDPLEKA MLTAVDWTLT KDEKVFPRSI KTQGLKIHQR FHFASALKRM SVLASYEKLK STDLCYIAAV KGAPETLHSM FSQCPPDYHH IHTEISREGA RVLALGYKEL GHLTHQQARE IKREALECSL KFGVFIVVSC
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PLKADSKAVI REIQNASHRV VMITGDNPLT ACHVAQELHF IDKAHTLILH PPSEKGQPCE
WRSIDSSIVL PLTLGSPKAL ALEHALCLTG DGLAHLQAVD PQQLLCLIPH VQVFARVAPK
QKEFVITSLK ELGYVTLMCG DGTNDVGALK HADVGVALLA NAPERVVERR RRPDRSPVLS
NSGPRVSRST KQKSALLSPE EPPASHRDRL SQVLRDLEEE STPIVKLGDA SIAAPFTSKL
SSIQCICHVI KQGRCTLVTT LQMFKILALN ALILAYSQSV LYLEGVKFSD FQATLQGLLL
AGCFLFISRS KPLKTLRER PLPNIFNLYT ILTVMLQFSV HFLSLVYLYR EAQARSPEKQ
EQFVDLYKEF EPSLVNSTVY IMAMAMQMAT FAINYKGPFF MESLPENKPL VWSLAVSLLA
IIGLLLGSSP DFNSQFGLVD IPVEFKLVIG QVLALDFCLA LLADRVLQFF LGTPKLRVPS

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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!

Product Details

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Endotoxin Level:

Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Grade:

Crystallography grade

Target Details

Target:

ATP13A1

Alternative Name:

Atp13a1 ([ATP13A1 Products](#))

Background:

Endoplasmic reticulum transmembrane helix translocase (EC 7.4.2.-) (Endoplasmic reticulum P5A-ATPase),FUNCTION: Endoplasmic reticulum translocase required to remove mitochondrial transmembrane proteins mistargeted to the endoplasmic reticulum. Acts as a dislocase that mediates the ATP-dependent extraction of mislocalized mitochondrial transmembrane proteins from the endoplasmic reticulum membrane. Specifically binds mitochondrial tail-anchored transmembrane proteins: has an atypically large substrate-binding pocket that recognizes and binds moderately hydrophobic transmembranes with short hydrophilic luminal domains. {ECO:0000250|UniProtKB:Q9HD20}.

Molecular Weight:

132.4 kDa

UniProt:

[Q9EPE9](#)

Application Details

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies

Application Details

as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment:

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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. If you have a special request, please contact us.

Handling Advice:

Avoid repeated freeze-thaw cycles.

Storage:

-80 °C

Storage Comment:

Store at -80°C.

Expiry Date:

Unlimited (if stored properly)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process