

Datasheet for ABIN3116972

ABCA5 Protein (AA 1-1642) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	ABCA5
Protein Characteristics:	AA 1-1642
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ABCA5 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MSTAIREVGV WRQTRTLLK NYLIKCRKK SSVQEILFPL FFLFWLILIS MMHPNKKYEE VPNIELNPMD KFTLSNLILG YTPVTNITSS IMQKVSTDHL PDVIITEEYT NEKEMLTSSL SKPSNFVGWV FKDSMSYELR FFPDMIPVSS IYMSDRAGCS KSCEAAQYWS SGFTVLQASI DAAIIQLKTN VSLWKELEST KAVIMGETAV VEIDTFPRGV ILIYLVIAFS PFGYFLAIHI VAEKEKKIKE FLKIMGLHDT AFWLSWVLLY TSLIFLMSLL MAVIATASLL FPQSSSIVIF LLFFLYGLSS VFFALMLTPL FKSKSHVGIV EFFVTVAFGF IGLMIILIES FPKSLVWLFS PFCHCTFVIG IAQVMHLEDF NEGASFNSLT AGPYPLIITI IMLTLNSIFY VLLAVYLDQV IPGEFGLRRS SLYFLKPSYW SKSKRNYEEL SEGNVNGNIS FSEIIEPVSS EFVGKEAIRI SGIQKTYRKK GENVEALRNL SFDIYEGQIT ALLGHSGTGK STLMNILCGL CPPSDGFASI YGHRVSEIDE MFEARKMIGI CPQLDIHFDV LTVEENLSIL ASIKGIPANN IIQEVQKVLL DLDMQTIKDN QAKKLSGGQK RKLSLGIAVL GNPKILLLDE PTAGMDPCSR HIVWNLLKYR KANRVTVFST HFMDADILA DRKAVISQGM LKCVGSSMFL KSKWGIGYRL SMYIDKYCAT ESLSLVKQH
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IPGATLLQQN DQQLVYSLPF KDMDKFSGLF SALDSHSNLG VISYGVSMITT LEDVFLKLEV
EAEIDQADYS VFTQQPLEEE MDSKSFDEME QSLILSETK AALVSTMSLW KQQMYTIAKF
HFFTLKRESK SVRSVLLLLL IFFTQIFMF LVHHSFKNAV VPIKLVPDLY FLKPGDKPHK
YKTSLLLQNS ADSDISDLIS FFTSQNIMVT MINDSDYVSV APHSAALNVM HSEKDYVFAA
VFNSTMVYSL PILVNIISNY YLYHLNVTET IQIWSTPFFQ EITDIVFKIE LYFQAALLGI IVTAMPPYFA
MENAENHKIK AYTQLKLSGL LPSAYWIGQA VVDIPLFFII LILMLGSLLA FHYGLYFYTV
KFLAVVFCIL GYVPSVILFT YIASFTFKKI LNTKEFWFSI YSVAALACIA ITEITFFMGY TIATILHYAF
CIIPIYPLL GCLISFIKIS WKNVRKNVDT YNPWDRLSVA VISPYLQCVL WIFLLQYYEK
KYGGRSIRKD PFFRNLSTKS KNRKLPEPPD NEDEDEDVKA ERLKVKELMG CQCCEEKPSI
MVSNLHKEYD DKKDFLLSRK VKKVATKYIS FCVKKGEILG LLGPNAGAGS TIINILVGD
EPTSGQVFLG DYSSETSEDD DSLKCMGYCP QINPLWPDIT LQEHFEIYGA VKGMSASDMK
EVISRITHAL DLKEHLQKTV KKLPAKIKRK LCFALSMLGN PQITLLDEPS TGMDFKAKQH
MWRAIRTAFA NRKRAAILTT HYMEEAEEAVC DRVAIMVSGQ LRCIGTVQHL KSKFGKGYFL
EIKLKDWIEN LEVDRLQREI QYIFPNASRQ ESFSSILAYK IPKEDVQSLS QSFFKLEEA
HAFATIEEYSF SQATLEQVFV ELTKEQEEED NSCGTLNSTL WWERTQEDRV VF

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-

Product Details

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 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:	ABCA5
Alternative Name:	ABCA5 (ABCA5 Products)
Background:	Cholesterol transporter ABCA5 (EC 7.6.2.-) (ATP-binding cassette sub-family A member 5),FUNCTION: Cholesterol efflux transporter in macrophages that is responsible for APOAI/high-density lipoproteins (HDL) formation at the plasma membrane under high cholesterol levels and participates in reverse cholesterol transport (PubMed:25125465). May play a role in the processing of autolysosomes (By similarity). {ECO:0000250 UniProtKB:Q8K448, ECO:0000269 PubMed:25125465}.

Target Details

Molecular Weight: 186.5 kDa

UniProt: [Q8WWZ7](#)

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!

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