

Datasheet for ABIN3113427

**ABCC1 Protein (AA 1-1531) (Strep Tag)****1** Image[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	ABCC1
Protein Characteristics:	AA 1-1531
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ABCC1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

## Product Details

Sequence:	MALRGFCSAD GSDPLWDWNV TWNTSNPDFT KCFQNTVLVW VPCFYLWACF PFYFLYLSRH DRGYIQMTPL NKTKTALGFL LWIVCWADLF YSFWERSRGI FLAPVFLVSP TLLGITMLLA TFLIQLERRK GVQSSGIMLT FWLVALVCAL AILRSKIMTA LKEDAQVDLF RDITFYVYFS LLLIQLVLSC FSDRSPLFSE TIHDPNPCPE SSASFLSRIT FWWITGLIVR GYRQPLEGSD LWSLNKEDTS EQVVPVLVKN WKKECAKTRK QPVKVYSSK DPAQPKESSK VDANEEVEAL IVKSPQKEWN PSLFKVLYKT FGPFYFLMSFF FKAHDLMMF SGPQILKLLI KFNVDTKAPD WQGYFYTVLL FVTACLQTLV LHQYFHICFV SGMRIKTAVI GAVYRKALVI TNSARKSSTV GEIVNLMSVD AQRFMDLATY INMIWSAPLQ VILALYLLWL NLGPSVLAGV AVMVLMVPVN AVMAMKTKTY QVAHMKSKDN RIKLMNEILN GIKVLKLYAW ELAFKDKVLA IRQEELKVLK KSAYLSAVGT FTWVCTPFLV ALCTFAVYVT IDENNILDAQ TAFVSLALFN ILRFLNLP MVISSIVQAS VSLKRLRIFL SHEELEPSDI ERRPVKDGGG TNSITVRNAT FTWARSPPPT LNGITFSIPE GALVAVVGQV GCGKSSLLSA LLAEMDKVEG HVAIKGSVAY VPQQAWIQND
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SLRENILFGC QLEPPYYRSV IQACALLPDL EILPSGDRTE IGEKGVNLSG GQKQRVSLAR  
AVYSNADIYL FDDPLSAVDA HVGKHIFENV IGPKGMLKNK TRILVTHSMS YLPQVDVIIV  
MSGGKISEMG SYQELLARDG AFAEFLRTYA STEQEQDAEE NGVTGVSGPG KEAKQMENG  
LVTDSAGKQL QRQLSSSSSY SGDISRHHNS TAEKQAEAK KEETWKLMEA DKAQTGQVKL  
SVYWDYMKAI GLFISFLSIF LFMCHVSAL ASNYWLSLWT DDPIVNGTQE HTKVRLSVYG  
ALGISQGIIV FGYSMAVSIG GILASRCLHV DLLHSILRSP MSFFERTPSG NLVNRFSKEL  
DTVDSMIPEV IKMFMGSLFN VIGACIVILL ATPIAAIIP PLGLIYFFVQ RFYVASSRQL KRLESVSRSP  
VYSHFNETLL GVSIVIRAFEE QERFIHQSDL KVDENQKAYY PSIVANRWLA VRLECVGNCI  
VLFAALFAVI SRHLSAGLV GLSVSYSLQV TTYLNWLVRM SSEMETNIVA VERLKEYSET  
EKEAPWQIQE TAPPSSWPQV GRVEFRNYCL RYREDLDFVL RHINVTINGG EKVGVGRTG  
AGKSSLTLGL FRINESAEGE IIDGINIAK IGLHDLRFKI TIIPQDPVLF SGSLRMNLDP FSQYSDEEVW  
TSLELAHLKD FVSALPDKLD HECAEGGENL SVGQRQLVCL ARALLRKTKE LVLDEATAAV  
DLETDDLIQS TIRTQFEDCT VLTIAHRLNT IMDYTRVIVL DKGEIQEYGA PSDLLQQRGL  
FYSMAKDAGL V

**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.

## Product Details

- 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:	ABCC1
Alternative Name:	ABCC1 ( <a href="#">ABCC1 Products</a> )
Background:	Multidrug resistance-associated protein 1 (EC 7.6.2.2) (ATP-binding cassette sub-family C member 1) (Glutathione-S-conjugate-translocating ATPase ABCC1) (EC 7.6.2.3) (Leukotriene C(4) transporter) (LTC4 transporter),FUNCTION: Mediates export of organic anions and drugs from the cytoplasm (PubMed:7961706, PubMed:16230346, PubMed:9281595, PubMed:10064732, PubMed:11114332). Mediates ATP-dependent transport of glutathione and glutathione conjugates, leukotriene C4, estradiol-17-beta-o-glucuronide, methotrexate, antiviral drugs and other xenobiotics (PubMed:7961706, PubMed:16230346, PubMed:9281595,

## Target Details

PubMed:10064732, PubMed:11114332). Confers resistance to anticancer drugs by decreasing accumulation of drug in cells, and by mediating ATP- and GSH-dependent drug export (PubMed:9281595). Hydrolyzes ATP with low efficiency (PubMed:16230346). Catalyzes the export of sphingosine 1-phosphate from mast cells independently of their degranulation (PubMed:17050692). Participates in inflammatory response by allowing export of leukotriene C4 from leukotriene C4-synthesizing cells (By similarity). Mediates ATP-dependent, GSH-independent cyclic GMP-AMP (cGAMP) export (PubMed:36070769). Thus, by limiting intracellular cGAMP concentrations negatively regulates the cGAS-STING pathway (PubMed:36070769). {ECO:0000250|UniProtKB:O35379, ECO:0000269|PubMed:10064732, ECO:0000269|PubMed:11114332, ECO:0000269|PubMed:16230346, ECO:0000269|PubMed:17050692, ECO:0000269|PubMed:36070769, ECO:0000269|PubMed:7961706, ECO:0000269|PubMed:9281595}.

Molecular Weight: 171.6 kDa

UniProt: [P33527](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

## 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.

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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)

## Images



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