

Datasheet for ABIN3106267  
**SLC46A2 Protein (AA 1-475) (Strep Tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	SLC46A2
Protein Characteristics:	AA 1-475
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC46A2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence:	MSPEVTCPRR GHLPRFHPRT WVEPVVASSQ VAASLYDAGL LLVVKASYGT GGSSNHSASP SPRGALEDQQ QRAISNFYII YNLVVGLSPL LSAYGLGWLS DRYHRKISIC MSLLGFLLSR LGLLLVLLD WPVEVLYGAA ALNGLFGGFS AFWSGVMALG SLGSSEGRRS VRLILIDLML GLAGFCGSMA SGHLFKQMAG HSGQGLILTA CSVSCASFAL LYSLLVLKVP ESVAKPSQEL PAVDTVSGTV GTYRTLDPDQ LDQQYAVGHP PSPGKAKPHK TTIALLFVGA IYDLAVVGT VDVIPLFVLR EPLGWNQVQV GYGMAAGYTI FITSFLGVLV FSRCFRDTTM IMIGMVSFGS GALLLAFVKE TYMFYIARAV MLFALIPVTT IRSAMSKLIK GSSYGVKFVI LQLSLALTGV VTSTLYNKIY QLTMDMFVGS CFALSSFLSF LAIIPISIVA YKQVPLSPYG DII EK <b>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.</b>
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Characteristics:	Key Benefits:
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- 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!

### 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.

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### 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.

## Product Details

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:	SLC46A2
Alternative Name:	SLC46A2 ( <a href="#">SLC46A2 Products</a> )
Background:	<p>Solute carrier family 46 member 2 (Thymic stromal cotransporter homolog),FUNCTION: Proton-coupled transporter that delivers pathogen-associated or danger-associated molecular patterns to cytosolic pattern recognition receptors as part of the innate immune response to microbes or tissue injury (PubMed:28539433, PubMed:34235268). Has selectivity toward mucopeptides that contain the amino acid diaminopimelic acid (DAP-type peptidoglycan mucopeptides) including Tri-DAP and tracheal toxin (TCT), common in Gram-negative bacteria and Gram-positive bacilli. In the context of immune recognition of skin microbiota, shuttles bacterial mucopeptides across the endolysosomal membranes into the cytosol for recognition by NOD1, triggering MYD88-dependent secretion of IL1A and neutrophil recruitment in a pyroptosis-type inflammatory process (PubMed:28539433). To a lesser extent and redundantly, transports muramyl dipeptides derived from most bacterial proteoglycans, eliciting NOD2 receptor activation and downstream inflammatory responses (PubMed:28539433). Postulated to function as a dominant importer of cyclic GMP-AMP dinucleotides (cGAMPs) in monocyte and macrophage cell lineages. Selectively imports cGAMPs derived from pathogenic bacteria such as 3'3'-cGAMP thus providing for differential immune recognition of pathogenic versus commensal bacteria. During tumorigenesis may transport extracellular tumor-derived 2'3'-cGAMP across the plasma membrane of M1-polarized macrophages to activate the anti-tumoral stimulator of interferon genes (STING) pathway (PubMed:34235268). The transport mechanism, its electrogenicity and stoichiometry remain to be elucidated (Probable). {ECO:0000269 PubMed:28539433, ECO:0000269 PubMed:34235268, ECO:0000305}.</p>
Molecular Weight:	51.1 kDa
UniProt:	<a href="#">Q9BY10</a>

## 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
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Application Details

	guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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