

Datasheet for ABIN3118351

SLC01B3 Protein (AA 1-702) (Strep Tag)



[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	SLC01B3
Protein Characteristics:	AA 1-702
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC01B3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MDQHQLNKT AESASSEKKK TRRCNGFKMF LAALSFSYIA KALGGIIMKI SITQIERRFD ISSSLAGLID GSFEIGNLLV IVFVSYFGSK LHRPKLIGIG CLLMGTGSIL TSLPHFFMGY YRYSKETHIN PSENSTSSLS TCLINQTLFS NGTSPEIVEK DCVKESGSHM WIYVFMGNML RGIGETPIVP LGISYIDDFK KEGHSSLYLG SLNAIGMIGP VIGFALGSLF AKMYVDIGYV DLSTIRITPK DSRWVGAWWL GFLVSGLFSI ISSIPFFFLP KNPKNPQKER KISLSLHVLC TNDDRNQTAN LTNQGNVTK NVTGFFQSLK SILTNPLYVI FLLLTLQVS SFIGSFTYVF KYMEQQYQGS ASHANFLGI ITIPTVATGM FLGGFIIKKF KLSLVGIAKF SFLTSMISFL FQLLYFPLIC ESKSVAGLTL TYDGNNSVAS HVDVPLSYCN SECNCDESQW EPVCGNNGIT YLSPCLAGCK SSSGIKKHTV FYNCSCVEVT GLQNRNYSAH LGECPRDNTC TRKFFIYVAI QVINSLFSAT GGTTFILLTV KIVQPELKAL AMGFQSMVIR TLGGILAPIY FGALIDKTCM KWSTNSCGAQ GACRIYNSVF FGRVYLGLSI ALRFPALVLY IVFIFAMKKK FQKDKTKASD NERKVMDEAN LEFLNNGEHF VPSAGTDSKT CNLDMQDNAA AN
-----------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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!

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®):

Product Details

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: SLC01B3

Alternative Name: SLC01B3 ([SLC01B3 Products](#))

Background: Solute carrier organic anion transporter family member 1B3 (Liver-specific organic anion transporter 2) (LST-2) (OATP1B3) (Organic anion transporter 8) (Organic anion-transporting polypeptide 8) (OATP-8) (Solute carrier family 21 member 8),FUNCTION: Mediates the Na(+)-independent uptake of organic anions (PubMed:15159445, PubMed:17412826, PubMed:10779507). Shows broad substrate specificity, can transport both organic anions such as bile acid taurocholate (cholytaurine) and conjugated steroids (17-beta-glucuronosyl estradiol, dehydroepiandrosterone sulfate (DHEAS), and estrone 3-sulfate), as well as eicosanoid leukotriene C4, prostaglandin E2 and L-thyroxine (T4) (PubMed:15159445, PubMed:17412826, PubMed:10779507, PubMed:12568656, PubMed:11159893, PubMed:19129463). Hydrogencarbonate/HCO3(-) acts as the probable counteranion that exchanges for organic anions (PubMed:19129463). Shows a pH -sensitive substrate specificity towards sulfated steroids, taurocholate and T4 which may be ascribed to the protonation state of the binding site and leads to a stimulation of substrate transport in an acidic microenvironment (PubMed:19129463). Involved in the clearance of bile acids and organic anions from the liver (PubMed:22232210). Can take up bilirubin glucuronides from plasma into the liver, contributing to the detoxification-enhancing liver-blood shuttling loop (PubMed:22232210). Transports coproporphyrin I and III, by-products of heme synthesis, and may be involved in their hepatic disposition (PubMed:26383540). May contribute to regulate the transport of organic compounds in testes across the blood-testis-barrier (Probable). Can transport HMG-CoA reductase inhibitors (also known as statins) such as pitavastatin, a clinically important class of hypolipidemic drugs (PubMed:15159445). May play an important role in plasma and tissue distribution of the structurally diverse chemotherapeutic drugs

Target Details

methotrexate and paclitaxel (PubMed:23243220). May also transport antihypertension agents, such as the angiotensin-converting enzyme (ACE) inhibitor prodrug enalapril, and the highly selective angiotensin II AT1-receptor antagonist valsartan, in the liver (PubMed:16627748, PubMed:16624871). {ECO:0000269|PubMed:10779507, ECO:0000269|PubMed:11159893, ECO:0000269|PubMed:12568656, ECO:0000269|PubMed:15159445, ECO:0000269|PubMed:16624871, ECO:0000269|PubMed:16627748, ECO:0000269|PubMed:17412826, ECO:0000269|PubMed:19129463, ECO:0000269|PubMed:22232210, ECO:0000269|PubMed:23243220, ECO:0000269|PubMed:26383540, ECO:0000305|PubMed:35307651}.

Molecular Weight: 77.4 kDa

UniProt: [Q9NPD5](#)

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.

Handling

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