

Datasheet for ABIN3113665

SLC01A2 Protein (AA 1-670) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	SLC01A2
Protein Characteristics:	AA 1-670
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC01A2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MGETEKRIET HRIRCLSKLK MFLLAITCAF VSKTLSGSYM NSMLTQIERQ FNIPTSLVGF</p> <p>INGSFEIGNL LLIIFVSYFG TKLHRPIMIG IGCVVMGLGC FLKSLPHFLM NQYESTVS</p> <p>VSGNLSSNSF LCMENGQIL RPTQDPSECT KEVKSLMWVY VLVGNIVRGM GETPILPLGI</p> <p>SYIEDFAKFE NSPLYIGLVE TGAIIGPLIG LLLASFCAV YVDTGFVNTD DLIITPTDTR</p> <p>WVGAWWFGFL ICAGVNVLT IPFFFLPNTL PKEGLETNAD IKNENEDKQ KEEVKKEKYG</p> <p>ITKDFLPFMK SLSCNPIYML FILVSVIQFN AFVNMISFMP KYLEQYQGIS SSDAIFLMGI</p> <p>YNLPICIGY IIGGLIMKKF KITVKQAAHI GCWLSLLEYL LYFLSFLMTC ENSSVVGINT</p> <p>SYEGIPQDLY VENDIFADCN VDCNCPSKIW DPVCGNNGLS YLSACLAGCE TSIGTGINMV</p> <p>FQNCSCIQTS GNSSAVLGLC DKGPDCLML QYFLILSAMS SFIYSLAAIP GYMVLLRCMK</p> <p>SEEKSLGVGL HTFCTRVFAG IPAPIYFGAL MDSTCLHWGT LKCGESGACR IYDSTTFRYI</p> <p>YLGLPAALRG SSFVPALIIL ILLRKCHLP ENASSGTELI ETKVKGKENE CKDIYQKSTV</p>

LKDDELKTKL

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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: SLC01A2

Alternative Name: SLC01A2 ([SLC01A2 Products](#))

Background: Solute carrier organic anion transporter family member 1A2 (OATP1A2) (OATP-A) (Organic anion-transporting polypeptide 1) (OATP-1) (Sodium-independent organic anion transporter) (Solute carrier family 21 member 3),FUNCTION: Na(+)-independent transporter that mediates the cellular uptake of a broad range of organic anions such as the endogenous bile salts cholate and deoxycholate, either in their unconjugated or conjugated forms (taurocholate and glycocholate), at the plasmam membrane (PubMed:7557095, PubMed:19129463). Responsible for intestinal absorption of bile acids (By similarity). Transports dehydroepiandrosterone 3-sulfate (DHEAS), a major circulating steroid secreted by the adrenal cortex, as well as estrone 3-sulfate and 17beta-estradiol 17-O-(beta-D-glucuronate) (PubMed:9539145, PubMed:23918469, PubMed:25560245, PubMed:12568656, PubMed:11159893, PubMed:19129463). Mediates apical uptake of all-trans-retinol (atROL) across human retinal pigment epithelium, which is essential to maintaining the integrity of the visual cycle and thus vision (PubMed:25560245). Involved in the uptake of clinically used drugs (PubMed:17301733, PubMed:20686826, PubMed:27777271). Capable of thyroid hormone transport (both T3 or 3,3',5'-triiodo-L-thyronine, and T4 or L-tyroxine) (PubMed:20358049, PubMed:19129463). Also transports prostaglandin E2 (PubMed:19129463). Plays roles in blood-brain and -cerebrospinal fluid barrier transport of organic anions and signal mediators, and in hormone uptake by neural cells (By similarity). May also play a role in the reuptake of neuropeptides such as substance P/TAC1 and vasoactive intestinal peptide/VIP released from retinal neurons (PubMed:25132355). May play an important role in plasma and tissue distribution of the structurally diverse chemotherapeutic drugs methotrexate and paclitaxel (PubMed:23243220). Shows a pH - sensitive substrate specificity 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). Hydrogencarbonate/HCO3(-) acts as the probable counteranion that exchanges for organic anions (PubMed:19129463). May contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (Probable).
{ECO:0000250|UniProtKB:O88397, ECO:0000250|UniProtKB:Q91YY5, ECO:0000269|PubMed:11159893, ECO:0000269|PubMed:12568656,

Target Details

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ECO:0000269|PubMed:23243220, ECO:0000269|PubMed:23918469,
ECO:0000269|PubMed:25132355, ECO:0000269|PubMed:25560245,
ECO:0000269|PubMed:27777271, ECO:0000269|PubMed:7557095,
ECO:0000269|PubMed:9539145, ECO:0000305|PubMed:35307651}.

Molecular Weight: 74.1 kDa

UniProt: [P46721](#)

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.

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Handling

Expiry Date: 12 months