

Datasheet for ABIN3118628

SLC01C1 Protein (AA 1-712) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	SLC01C1
Protein Characteristics:	AA 1-712
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC01C1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MDTSSKENIQ LFCKTSVQPV GRPSFKTEYP SSEEKQPCCG ELKVFLCALS FVYFAKALAE GYLKSTITQI ERRFDIPSSL VGVIDGSFEI GNLLVITFVS YFGAKLHRPK IIGAGCVIMG VGTLLIAMPQ FFMEQYKYER YSPSSNSTLS ISPCLLESSS QLPVSVMEKS KSKISNECEV DTSSSMWIYV FLGNLLRGIG ETPIQPLGIA YLDDFASEDN AAFYIGCVQT VAIIGPIFGF LLGSLCAKLY VDIGFVNLDH ITITPKDPQW VGAWWLGyli AGIISLLAAV PFWYLPKSLP RSQSREDSNS SSEKSKFIID DHTDYQTPQG ENAKIMEMAR DFLPSLKNLF GNPVYFLYLC TSTVQFNSLF GMVTYKPKYI EQQYGQSSSR ANFVIGLINI PAVALGIFSG GIVMKKFRIS VCGAAKLYLG SSVFGYLLFL SLFALGCENS DVAGLTVSYQ GTKPVSYHER ALFSDCNSRC KCSETKWEPM CGENGITYVS ACLAGCQTSN RSGKNIIFYN CTCVGIAASK SGNSSGIVGR CQKDNGCPQM FLYFLVISVI TSYTSLGGI PGYILLRLCI KPQLKSFALG IYTLAIRVLA GIPAPVYFGV LIDTSCLKWG FKRCGSRGSC RLYDSNVFRH IYLGTLVILG TVSILLSIAV LFIKKNYVS KHRSFITKRE RTMVSTRFQK ENYTTS DHLL QPNYWPGKET QL
-----------	---

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:	SLC01C1
Alternative Name:	SLC01C1 (SLC01C1 Products)
Background:	<p>Solute carrier organic anion transporter family member 1C1 (Organic anion transporter 1C1) (OATP1C1) (Organic anion transporter F) (OATP-F) (Organic anion transporter polypeptide-related protein 5) (OAT-RP-5) (OATP-RP5) (Organic anion-transporting polypeptide 14) (OATP-14) (Solute carrier family 21 member 14) (Thyroxine transporter),FUNCTION: Mediates the Na(+)-independent high affinity transport of organic anions such as the thyroid hormones L-thyroxine (T4), L-thyroxine sulfate (T4S), and 3,3',5'-triiodo-L-thyronine (reverse T3, rT3) at the plasma membrane (PubMed:12351693, PubMed:18566113, PubMed:19129463). Regulates T4 levels in different brain regions by transporting T4, and also by serving as an export pump for T4S, which is a source of T4 after hydrolysis by local sulfatases (PubMed:18566113). Increases the access of these substrates to the intracellular sites where they are metabolized by the deiodinases (PubMed:18566113). Other potential substrates, such as triiodothyronine (T3), 17-beta-glucuronosyl estradiol (17beta-estradiol 17-O-(beta-D-glucuronate)), estrone-3-sulfate (E1S) and sulfobromophthalein (BSP) are transported with much lower efficiency (PubMed:12351693, PubMed:19129463). Transports T4 and E1S in a pH -insensitive manner (PubMed:19129463). Facilitates the transport of thyroid hormones across the blood-brain barrier and into glia and neuronal cells in the brain (PubMed:30296914).</p> <p>{ECO:0000269 PubMed:12351693, ECO:0000269 PubMed:18566113, ECO:0000269 PubMed:19129463, ECO:0000269 PubMed:30296914}.</p>
Molecular Weight:	78.7 kDa
UniProt:	Q9NYB5

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:	<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