

Datasheet for ABIN3116970

## Solute Carrier Family 5 (Sodium/inositol Cotransporter), Member 11 (SLC5A11) (AA 1-675) protein (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	Solute Carrier Family 5 (Sodium/inositol Cotransporter), Member 11 (SLC5A11)
Protein Characteristics:	AA 1-675
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MESGTSSPQP PQLDPLDAFP QKGLEPGDIA VLVLYFLFVL AVGLWSTVKT KRDTVKG YFL</p> <p>AGGDMVWWPV GASLFASNVG SGHFIGLAGS GAATGISVSA YELNGLFSVL MLAWIFLPIY</p> <p>IAGQVTTMPE YLRKRFGGIR IPIILAVLYL FIYIFTKISV DMYAGAFIQ QSLHLDLYLA IVGLLAITAV</p> <p>YTVAGGLAAV IYTDALQTLI MLIGALTLMG YSFAAVGGME GLKEYFLAL ASNRSENSSC</p> <p>GLPREDAFHI FRDPLTSDLP WPGVLFGMSI PSLWYWCTDQ VIVQRTLAAK NLSHAKGGAL</p> <p>MAAYLKVLPL FIMVFPGMVS RILFPDQVAC ADPEICQKIC SNPSGCSDIA YPKLVLELLP</p> <p>TGLRGLMMAV MVAALMSSLT SIFNSASTIF TMDLWNHLRP RASEKELMIV GRVFVLLLVL</p> <p>VSILWIPVVQ ASQGGQLFIY IQSISSYLQP PVAVVFIMGC FWKRTNEKGA FWGLISGLLL</p> <p>GLVRLVLDI YVQPRCDQPD ERPVLVKSII YLYFSMILST VTLITVSTVS WFTEPPSKEM</p> <p>VSHLTWFTRH DPVVQKEQAP PAAPLSLTLS QNGMPEASSS SSVQFEMVQE NTSKTHSCDM</p> <p>TPKQSKVVKA ILWLCGIQEK GKEELPARAE AIVSLEENP LVKTLDDVNL IFCVSCAIFI WGYFA</p>

**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®).

---

### Purity:

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

---

## Product Details

Grade: custom-made

## Target Details

Target: Solute Carrier Family 5 (Sodium/inositol Cotransporter), Member 11 (SLC5A11)

Alternative Name: SLC5A11 ([SLC5A11 Products](#))

Background: Sodium/myo-inositol cotransporter 2 (Na<sup>+</sup>)/myo-inositol cotransporter 2) (Sodium-dependent glucose cotransporter) (Sodium/glucose cotransporter KST1) (Sodium/myo-inositol transporter 2) (SMIT2) (Solute carrier family 5 member 11),FUNCTION: Involved in the sodium-dependent cotransport of myo-inositol (MI) with a Na<sup>+</sup>:MI stoichiometry of 2:1 (PubMed:15172003, PubMed:19032932). Exclusively responsible for apical MI transport and absorption in intestine (By similarity). Can also transport D-chiro-inositol (DCI) but not L-fucose (PubMed:15172003, PubMed:19032932). Exhibits stereospecific cotransport of both D-glucose and D-xylose (By similarity). May induce apoptosis through the TNF-alpha, PDCD1 pathway (PubMed:15172003, PubMed:18069935). May play a role in the regulation of MI concentration in serum, involving reabsorption in at least the proximal tubule of the kidney (By similarity). {ECO:0000250|UniProtKB:Q28728, ECO:0000250|UniProtKB:Q9Z1F2, ECO:0000269|PubMed:15172003, ECO:0000269|PubMed:18069935, ECO:0000269|PubMed:19032932}.

Molecular Weight: 74.0 kDa

UniProt: [Q8WWX8](#)

## 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

## Application Details

---

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.  
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.

Expiry Date: 12 months