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Datasheet for ABIN3116773  
**SLC30A5 Protein (AA 1-765) (Strep Tag)**

### Overview

Quantity:	1 mg
Target:	SLC30A5
Protein Characteristics:	AA 1-765
Origin:	Human
Source:	Tobacco ( <i>Nicotiana tabacum</i> )
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC30A5 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

### Product Details

Sequence: MEEKYGGDVL AGPGGGGGLG PVDVPSARLT KYIVLLCFTK FLKAVGLFES YDLLKAVHIV  
QFIFILKLG T AFFMVL FQKP FSSGKTITKH QWIKIFKHAV AGCIISLLWF FGLTLCGPLR  
TLLLFEHSDI VVISLLSVLF TSSGGGPAKT RGAFFIIAV ICLLLFDNDD LMAKMAEHPE  
GHHDSALTHM LYTAIAFLGV ADHKGGVLLL VLALCCKVGF HTASRKLSVD VGGAKRLQAL  
SHLVSVLLLC PWVIVLSVTT ESKVESWFSL IMPFATVIFF VMILDFYVDS ICSVKMEVSK  
CARYGSFPIF ISALLFGNFW THPITDQLRA MNKAAHQEST EHVLSGGVVV SAIFFILSAN  
ILSSPSKRGQ KGTLIGYSPE GTPLYNFMGD AFQHSSQSIP RFIKESLKQI LEESDSRQIF  
YFLCLNLLFT FVELFYGVLT NSLGLISDGF HMLFDCSALV MGLFAALMSR WKATRIFSYG  
YGRIEILSGF INGLFLVIA FVFMESVAR LIDPPELDTH MLTPVSVGGI IVNLIGICAF  
SHAHSHAHGA SQGSCHSSDH SHSHHMHGHS DHGHGSHSGS AGGGMNANMR GVFLHVLADT  
LGSIGVIVST VLIEQFGWFI ADPLCSLFIA ILIFLSVPL IKDACQVLLL RLPPEYEKEL HIALEKIQKI  
EGLISYRDPH FWRHSASIVA GTIHIQVTSV VLEQRIVQQV TGILKDAGVN NLTIQVEKEA

YFQHMSGLST GFHDVLAMTK QMESMKYCKD GTYIM

**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.**

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### 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.

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### Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System

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## Product Details

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(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.

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Purity: >80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

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Endotoxin Level: Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

## Target Details

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Target: SLC30A5

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Alternative Name: SLC30A5 ([SLC30A5 Products](#))

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Background: Proton-coupled zinc antiporter SLC30A5 (Solute carrier family 30 member 5) (Zinc transporter 5) (ZnT-5) (ZnT-like transporter 1) (hZTL1),FUNCTION: Together with SLC30A6 forms a functional proton-coupled zinc ion antiporter mediating zinc entry into the lumen of organelles along the secretory pathway (PubMed:11904301, PubMed:15525635, PubMed:15994300, PubMed:19366695, PubMed:22529353). By contributing to zinc ion homeostasis within the early secretory pathway, regulates the activation and folding of enzymes like alkaline phosphatases and enzymes involved in phosphatidylinositol glycan anchor biosynthesis (PubMed:15525635, PubMed:15994300, PubMed:16636052, PubMed:35525268). Through the transport of zinc into secretory granules of pancreatic beta-cells, plays an important role in the storage and secretion of insulin (PubMed:11904301). {ECO:0000269|PubMed:11904301, ECO:0000269|PubMed:15525635, ECO:0000269|PubMed:15994300, ECO:0000269|PubMed:16636052, ECO:0000269|PubMed:19366695, ECO:0000269|PubMed:22529353, ECO:0000269|PubMed:35525268}., FUNCTION: [Isoform 2]: Zinc ion:proton antiporter mediating influx and efflux of zinc at the plasma membrane. {ECO:0000269|PubMed:11937503, ECO:0000269|PubMed:17355957}.

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Molecular Weight: 84.0 kDa

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UniProt: [Q8TAD4](#)

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Pathways: [Peptide Hormone Metabolism](#), [Transition Metal Ion Homeostasis](#), [Proton Transport](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

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## Application Details

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as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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Comment:

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Restrictions:

For Research Use only

## Handling

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Format:

Liquid

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Buffer:

The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

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Handling Advice:

Avoid repeated freeze-thaw cycles.

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Storage:

-80 °C

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Storage Comment:

Store at -80°C.

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Expiry Date:

Unlimited (if stored properly)