

## Datasheet for ABIN3136498

# SLC26A6 Protein (AA 1-758) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	SLC26A6
Protein Characteristics:	AA 1-758
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC26A6 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Brand:	AliCE®
Sequence:	MGLPDGSDQG THQTQALLSA AQEMELQRRD YHVERPLLNQ EQLEDLGHWG PAAKTHQWRT
	WFRCSRARAH SLLLQHVPVL GWLPRYPVRE WLLGDLLSGL SVAIMQLPQG LAYALLAGLP
	PMFGLYSSFY PVFIYFLFGT SRHISVGTFA VMSVMVGSVT ESLTADKAFV QGLNATADDA
	RVQVAYTLSF LVGLFQVGLG LVHFGFVVTY LSEPLVRSYT TAASVQVLVS QLKYVFGIKL
	SSHSGPLSVI YTVLEVCAQL PETVPGTVVT AIVAGVALVL VKLLNEKLHR RLPLPIPGEL
	LTLIGATGIS YGVKLNDRFK VDVVGNITTG LIPPVAPKTE LFATLVGNAF AIAVVGFAIA
	ISLGKIFALR HGYRVDSNQE LVALGLSNLI GGFFQCFPVS CSMSRSLVQE STGGNTQVAG
	AVSSLFILLI IVKLGELFRD LPKAVLAAVI IVNLKGMMKQ FSDICSLWKA NRVDLLIWLV
	TFVATILLNL DIGLAVSIVF SLLLVVVRMQ LPHYSVLGQV PDTDIYRDVA EYSGAKEVPG
	VKVFRSSATL YFANAELYSD SLKEKCGVDV DRLITQKKKR IKKQEMKLKR MKKAKKSQKQ
	DASSKISSVS VNVNTNLEDV KSNDVEGSEA KVHQGEELQD VVSSNQEDAK APTMTSLKSL

GLPQPGFHSL ILDLSTLSFV DTVCIKSLKN IFRDFREIEV EVYIAACYSP VVAQLEAGHF FDESITKQHV FASVHDAVTF ALSHRKSVPK SPVLATKL

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 posttranslational 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:	SLC26A6
Alternative Name:	Slc26a6 (SLC26A6 Products)

Background:

Solute carrier family 26 member 6 (Anion exchange transporter) (Chloride-formate exchanger) (Pendrin-L1) (Pendrin-like protein 1) (Putative anion transporter-1) (Pat-1), FUNCTION: Apical membrane anion-exchanger with wide epithelial distribution that plays a role as a component of the pH buffering system for maintaining acid-base homeostasis. Acts as a versatile DIDSsensitive inorganic and organic anion transporter that mediates the uptake of monovalent anions like chloride, bicarbonate, formate and hydroxyl ion and divalent anions like sulfate and oxalate. Functions in multiple exchange modes involving pairs of these anions, which include chloride-bicarbonate, chloride-oxalate, oxalate-formate, oxalate-sulfate and chloride-formate exchange. Apical membrane chloride-bicarbonate exchanger that mediates luminal chloride absorption and bicarbonate secretion by the small intestinal brush border membrane and contributes to intracellular pH regulation in the duodenal upper villous epithelium during protoncoupled peptide absorption, possibly by providing a bicarbonate import pathway. Its association with carbonic anhydrase CA2 forms a bicarbonate transport metabolon, hence maximizes the local concentration of bicarbonate at the transporter site. Mediates also intestinal chloride absorption and oxalate secretion, thereby preventing hyperoxaluria and calcium oxalate urolithiasis. Transepithelial oxalate secretion, chloride-formate, chloride-oxalate and chloride-bicarbonate transport activities in the duodenum are inhibited by PKC activation in a calcium-independent manner. The apical membrane chloride-bicarbonate exchanger provides also a major route for fluid and bicarbonate secretion into the proximal tubules of the kidney as well as into the proximal part of the interlobular pancreatic ductal tree, where it mediates electrogenic chloride-bicarbonate exchange with a chloride-bicarbonate stoichiometry of 1:2, and hence will dilute and alkalinize protein-rich acinar secretion. Mediates also the transcellular sulfate absorption and oxalate secretion across the apical membrane in the duodenum and the formate ion efflux at the apical brush border of cells in the proximal tubules of kidney. Plays a role in sperm capacitation by increasing intracellular pH . {ECO:0000269|PubMed:11842009, ECO:0000269|PubMed:12119287, ECO:0000269|PubMed:16141316, ECO:0000269|PubMed:16532010, ECO:0000269|PubMed:16606687, ECO:0000269|PubMed:17053783, ECO:0000269|PubMed:17170027,

Restrictions:

ECO:0000269|PubMed:18046080, ECO:0000269|PubMed:18496516, ECO:0000269|PubMed:20150244, ECO:0000269|PubMed:20969732, ECO:0000269|PubMed:21976599, ECO:0000269|PubMed:22021714, ECO:0000269|PubMed:22895259, ECO:0000269|PubMed:23933580, ECO:0000269|PubMed:29530983}., FUNCTION: [Isoform 2]: Mediates electrogenic chloridebicarbonate exchange with a chloride-bicarbonate stoichiometry of 1:2 (PubMed:12217875, PubMed:23933580). Also mediates exchange of chloride-formate and chloride-oxalate ions (PubMed:11459928, PubMed:12217875, PubMed:15203903, PubMed:17151144, PubMed:23933580). Mediates transcellular sulfate absorption (PubMed:12217875). {ECO:0000269|PubMed:11459928, ECO:0000269|PubMed:12217875, ECO:0000269|PubMed:15203903, ECO:0000269|PubMed:17151144, ECO:0000269|PubMed:23933580}. Molecular Weight: 82.8 kDa UniProt: Q8CIW6 Pathways: Dicarboxylic Acid Transport 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!

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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months