

Datasheet for ABIN3089816

SLC4A9 Protein (AA 1-983) (Strep Tag)



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1 Image

Overview

Quantity:	0.5 mg
Target:	SLC4A9
Protein Characteristics:	AA 1-983
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC4A9 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MEMKLPGQEG FEASSAPRNI PSGELDSNPD PGTGSPDGP SDTESKELGV PKDPLLIQL
 NELLGWPQAL EWRETGSSSA SLLLDMGEMP SITLSTHLHH RWVLFEEKLE VAAGRWSAPH
 VPTLALPSLQ KLRSLLAEGL VLLDCPAQSL LELVEQVTRV ESLSPELRGQ LQALLLRPQ
 HYNQTTGTRP CWGSTHPRKA SDNEEAPLRE QCQNPLRQKL PPGAEAGTVL AGELGFLAQP
 LGAFVRLRNP VVLGSLTEVS LPSRFFCLLL GPCMLGKGYH EMGRAAAVLL SDPQFQWSVR
 RASNLHDLLA ALDAFLEEVTVLPPGRWDPT ARIPPPKCLP SQHKRLPSQQ REIRGPAVPR
 LTSAEDRHRH GPHAHSPELQ RTGRLFGGLI QDVRRKVPWY PSDFLDALHL QCFSVLYIY
 LATVTNAITF GLLGDATDG AQGVLESFLG TAVAGAAFCL MAGQPLTILS STGPVLFER
 LLFSFSRDYS LDYLPFRLWV GIWVATFCLV LVATEASVLV RYFTRFTEEG FCALISLIFI
 YDAVGKMLNL THTYPIQKPG SSAYGCLCQY PGPGGNESQW IRTRPKDRDD IVSMDLGLIN
 ASLLPPPECT RQGGHPRGPG CHTVPDIAFF SLLLFLTSFF FAMALKCVKT SRFFPSVVRK
 GLSDFSSVLA ILLGCGLDAF LGLATPKLMV PREFKPTLPG RGWLVSPPFGA NPWWWSVAAA

LPALLLSILI FMDQQITAVI LNRMEYRLQK GAGFHLDLFC VAVLMLL TSA LGLPWYVSAT
VISLAHMDSL RRESRACAPG ERPNFLGIRE QRLTGLVFI LTGASIFLAP VLKFI MPV L
YGIFLYMGVA ALSSIQFTNR VKLLLMPAKH QPDLLLLRHV PLTRVHLFTA IQLACLGLLW
IIKSTPAAI FPLMLLGLVG VRKALERVFS PQELLWDEL MPEEERSIPE KGLEPEHSFS
GSDSESELM YQPKAPEINI SVN

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

Product Details

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®): <ol style="list-style-type: none">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:	SLC4A9
Alternative Name:	SLC4A9 (SLC4A9 Products)
Background:	Anion exchange protein 4 (AE 4) (Anion exchanger 4) (Sodium bicarbonate cotransporter 5) (Solute carrier family 4 member 9),FUNCTION: Electroneutral Cl(-)/HCO3(-) antiporter that favors chloride ion entry and efflux of hydrogencarbonate and sodium ion across the basolateral membrane and may participate in salivary secretion (PubMed:27114614). Also mediates Cl(-)/HCO3(-) exchange activity in the presence of K(+) as well as Cs(+), Li(+), and Rb(+) (By similarity). Does not contribute to Cl(-)/HCO3(-) exchanger in the apical membrane of the upper villous epithelium (By similarity). {ECO:0000250 UniProtKB:A0A494BA31, ECO:0000269 PubMed:27114614}.
Molecular Weight:	108.2 kDa
UniProt:	Q96Q91

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.
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Application Details

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)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process