

Datasheet for ABIN3115604

SLC9A4 Protein (AA 1-798) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	SLC9A4
Protein Characteristics:	AA 1-798
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC9A4 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MALQMFVTYS PWNCLLLLVA LECSEASSDL NESANSTAQY ASNAWFAAAS SEPEEGISVF</p> <p>ELDYDYVQIP YEVTWLILLA SLAKIGFHLV HRLPGLMPES CLLILVGALV GGIIFGTDHK</p> <p>SPPVMDSSII FLYLLPPIVL EGGYFMPTRP FFENIGSILW WAVLGALINA LGIGLSLYLI</p> <p>CQVKAFGLGD VNLLQNLLFG SLISAVDPVA VLAVFEEARV NEQLYMMIFG EALLNDGITY</p> <p>VLYNMLIAFT KMHKFEDIET VDILAGCARF IVVGLGGVLF GIVFGFISAF ITRFTQNISA IEPLIVFMFS</p> <p>YLSYLAAETL YLSGILAITA CAVTMKKYVE ENVSQTSYTT IKYFMKMLSS VSETLIFIM</p> <p>GVSTVGKNHE WNWAFICFTL AFCQIWRAIS VFALFYISNQ FRTFPFSIKD QCIIFYSGVR</p> <p>GAGSFSLAFL LPLSLFPRKK MFVTATLVVI YFTVFIQGIT VGPLVRYLDV KKTNNKESIN</p> <p>EELHIRLMDH LKAGIEDVCG HWSHYQVRDK FKKFDHRYLR KILIRKNLPK SSIVSLYKKL</p> <p>EMKQAIEMVE TGILSSTAFS IPHQAQRIQG IKRLSPEDVE SIRDILTSNM YQVRQRRTLSY</p> <p>NKYNLKPQTS EKQAKEILIR RQNTLRESMR KGHSLPWGKP AGTKNIRYLS YPYGNPQSAG</p>

RDTRAAGFSD DDSSDPGSPS ITFSACSRIG SLQKQEAQEI IPMKSLHRGR KAFSFGYQRN
TSQEEYLGGV RRVALRPKPL FHAVDEEGES GGESEKASL VEVRSRWTAD HGHGRDHHS
HSPLLQKK

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

Product Details

	System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	SLC9A4
Alternative Name:	SLC9A4 (SLC9A4 Products)
Background:	<p>Sodium/hydrogen exchanger 4 (Na(+)/H(+) exchanger 4) (NHE-4) (Solute carrier family 9 member 4),FUNCTION: Electroneutral antiporter that exchanges sodium for protons or ammonium ions at the basolateral membrane of epithelia to regulate cell volume and intracellular pH upon hypertonic conditions (By similarity). As part of transcellular ammonia transport in renal tubules, mediates basolateral ammonium extrusion in the medullary thick ascending limb, regulating the corticopapillary ammonium gradient and overall renal acid excretion (By similarity). Mediates sodium:proton exchange in gastric parietal cells secondary to cAMP-dependent acid secretion and hyperosmolarity. Possibly coupled to chloride:bicarbonate antiporter, enables loading of parietal cells with sodium and chloride ions to maintain cell volume and normal gastric acid secretion (By similarity). Functions as a sodium sensor in neurons of organum vasculosum of the lamina terminalis where it regulates water intake in response to increased sodium concentration in body fluids (By similarity). {ECO:0000250 UniProtKB:P26434, ECO:0000250 UniProtKB:Q8BUE1}.</p>
Molecular Weight:	89.8 kDa
UniProt:	Q6AI14

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</p>

Application Details

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!

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