Datasheet for ABIN3136267

SLC4A7 Protein (AA 1-1034) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SLC4A7
Protein Characteristics:	AA 1-1034
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC4A7 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MEADGAGEQM RPLLTRGPDE EAVVDLGKTS STVNTKFEKE ELESHRAVYV GVHVPFSKES RRRHKHRGHK HHHRRRKDKD SDKEDGRESP SYDTPSQRVQ FILGTEDDDE EHIPHDLFTE MDELCYRDGE EYEWKETARW LKFEEDVEDG GDRWSKPYVA TLSLHSLFEL RSCILNGTVM LDMRASTLDE IADMVLDNMI ASGQLDDSIR ENVREALLKR HHHQNEKRFT SRIPLVRSFA DIGILASPQS APGNLDNSKS GEMKGNGSGG SRENSTVDFS KVDMNFMRKI PTGAEASNVL VGEVDFLERP IIAFVRLAPA VLLSGLTEVP VPTRFLFLLL GPAGKAPQYH EIGRSIATLM TDEIFHDVAY KAKDRNDLLS GIDEFLDQVT VLPPGEWDPS IRIEPPKSVP SQEKRKIPVF PNGSAAMSVG PPKEDDHHAG PELQRTGRLF GGLILDIKRK APFFLSDFKD ALSLQCLASI LFLYCACMSP VITFGGLLGE ATEGRISAIE SLFGASLTGI AYSLFAGQPL TILGSTGPVL VFEKILFKFC RDYHLSYLSL RTSIGLWTSF LCIVLVATDA SSLVCYITRF TEEAFAALIC IIFIYEALEK LFHLGEIYAF NMHNNLDELT SYTCVCAEPS NPSNETLELW KRKNITAYSV SWGNLTVSEC

KTFHGMFVGS ACGPHGPYVP DVLFWCVVLF FTTFFLSSFL KQFKTKGYFP TKVRSTISDF AVFLTIVIMV AIDYLVGIPS PKLHVPEKFE PTDPSRGWII SPLGDNPWWT LLIAAVPALL CTILIFMDQQ ITAVIINRKE HKLKFIPMPV LYGVFLYMGV SSLKGIQFFD RIKLFGMPAK HQPDLIYLRY VPLWKVHVFT VVQLTCLVLL WVIKASAAAV VFPMMVLALV FVRKLMDLCF TKRELSWLDD LMPESKKKKE DDKKKKEKEE AERMLQDDED TVHLPFERGS LLQIPVKTLK YSIDPSVVNI SDEMAKTAQW KALSMNTENA KVTRPNTSPE KPVSVTINFE DEPSKKYMDA ETSL

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.

Product Details

- 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).
Grade:	custom-made

Target Details

Target:	SLC4A7
Alternative Name:	Slc4a7 (SLC4A7 Products)
Background:	Sodium bicarbonate cotransporter 3 (Solute carrier family 4 member 7),FUNCTION: Electroneutral sodium- and bicarbonate-dependent cotransporter with a Na(+):HCO3(-) 1:1 stoichiometry (PubMed:16439691, PubMed:22586225, PubMed:23401617). Mediates the sodium-dependent bicarbonate transport important for pH recovery after acid load as well as for regulation of steady-state pH in the duodenum and vascular smooth muscle cells (PubMed:16439691, PubMed:22586225, PubMed:23401617). Plays a key role in macrophage acidification, mediating bicarbonate import into the cytoplasm which is crucial for net acid extrusion and maintenance of cytoplasmic pH during phagocytosis (By similarity). Provides cellular bicarbonate for de novo purine and pyrimidine synthesis and is a key mediator of de novo nucleotide synthesis downstream of mTORC1 signaling in proliferating cells (By similarity). May be involved in maintaining locomotor activity, exploratory behavior, and hearing (PubMed:12808454, PubMed:33321164). {ECO:0000250|UniProtKB:Q9Y6M7, ECO:0000269|PubMed:12808454, ECO:0000269|PubMed:16439691, ECO:0000269|PubMed:22586225, ECO:0000269|PubMed:23401617, ECO:0000269|PubMed:33321164}.
Molecular Weight:	116.5 kDa
UniProt:	Q8BTY2

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.

Application Details

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!
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