Datasheet for ABIN3119578

SLC4A7 Protein (AA 1-1214) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	SLC4A7
Protein Characteristics:	AA 1-1214
Origin:	Human
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:	MERFRLEKKL PGPDEEAVVD LGKTSSTVNT KFEKEELESH RAVYIGVHVP FSKESRRRHR HRGHKHHHRR RKDKESDKED GRESPSYDTP SQRVQFILGT EDDDEEHIPH DLFTEMDELC YRDGEEYEWK ETARWLKFEE DVEDGGDRWS KPYVATLSLH SLFELRSCIL NGTVMLDMRA STLDEIADMV LDNMIASGQL DESIRENVRE ALLKRHHHQN EKRFTSRIPL VRSFADIGKK HSDPHLLERN GEGLSASRHS LRTGLSASNL SLRGESPLSL LLGHLLPSSR AGTPAGSRCT TPVPTPQNSP PSSPSISRLT SRSSQESQRQ APELLVSPAS DDIPTVVIHP PEEDLEAALK GEEQKNEENV DLTPGILASP QSAPGNLDNS KSGEIKGNGS GGSRENSTVD FSKVDMNFMR KIPTGAEASN VLVGEVDFLE RPIIAFVRLA PAVLLTGLTE VPVPTRFLFL LLGPAGKAPQ YHEIGRSIAT LMTDEIFHDV AYKAKDRNDL LSGIDEFLDQ VTVLPPGEWD PSIRIEPPKS VPSQEKRKIP VFHNGSTPTL GETPKEAAHH AGPELQRTGR LFGGLILDIK RKAPFFLSDF KDALSLQCLA SILFLYCACM SPVITFGGLL GEATEGRISA IESLFGASLT GIAYSLFAGQ

PLTILGSTGP VLVFEKILYK FCRDYQLSYL SLRTSIGLWT SFLCIVLVAT DASSLVCYIT RFTEEAFAAL ICIIFIYEAL EKLFDLGETY AFNMHNNLDK LTSYSCVCTE PPNPSNETLA QWKKDNITAH NISWRNLTVS ECKKLRGVFL GSACGHHGPY IPDVLFWCVI LFFTTFFLSS FLKQFKTKRY FPTKVRSTIS DFAVFLTIVI MVTIDYLVGV PSPKLHVPEK FEPTHPERGW IISPLGDNPW WTLLIAAIPA LLCTILIFMD QQITAVIINR KEHKLKKGAG YHLDLLMVGV MLGVCSVMGL PWFVAATVLS ISHVNSLKVE SECSAPGEQP KFLGIREQRV TGLMIFILMG LSVFMTSVLK FIPMPVLYGV FLYMGVSSLK GIQLFDRIKL FGMPAKHQPD LIYLRYVPLW KVHIFTVIQL TCLVLLWVIK VSAAAVVFPM MVLALVFVRK LMDLCFTKRE LSWLDDLMPE SKKKKEDDKK KKEKEEAERM LQDDDDTVHL PFEGGSLLQI PVKALKYSPD KPVSVKISFE DEPRKKYVDA 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!

Product Details

	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®).
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 (Electroneutral Na/HCO(3) cotransporter) (Sodium bicarbonate cotransporter 2) (Sodium bicarbonate cotransporter 2b) (Bicarbonate transporter) (Solute carrier family 4 member 7),FUNCTION: Electroneutral sodium- and bicarbonate-dependent cotransporter with a Na(+):HCO3(-) 1:1 stoichiometry (PubMed:10347222, PubMed:12403779, PubMed:14736710, PubMed:14578046). 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 (By similarity). 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 (PubMed:29779931). 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 (PubMed:35772404). {ECO:0000250|UniProtKB:Q8BTY2, ECO:0000269|PubMed:10347222, ECO:0000269|PubMed:12403779, ECO:0000269|PubMed:14578046, ECO:0000269|PubMed:14736710, ECO:0000269|PubMed:29779931, ECO:0000269|PubMed:35772404}., FUNCTION: [Isoform 6]: 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. {ECO:0000269|PubMed:29779931}.
Molecular Weight:	136.0 kDa

Target Details

UniProt:	Q9Y6M7

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!
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

