Datasheet for ABIN3126783

NHE8 Protein (AA 1-576) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	NHE8 (SLC9A8)
Protein Characteristics:	AA 1-576
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NHE8 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MAEEEFSNTT HETFNFTLHT TLGVTTKLVL PTPAKPILPV QTGEQAQQEE QSSGMTIFFS LLVLAICIIL VHLLIRYRLH FLPESVAVVS LGILMGAVIK VIEFKKLANW KEEEMFRPNM FFLLLLPPII FESGYSLHKG NFFQNIGSIT LFAVFGTAIS AFVVGGGIYF LGQADVISKL NMTDSFAFGS LISAVDPVAT IAIFNALHVD PVLNMLVFGE SILNDAVSIV LTNTAEGLTR KHMSDVSGWQ TFSQALGYFL KMFFGSAALG TLTGLISALV LKHIDLRKTP SLEFGMMIIF AYLPYGLAEG ISLSGIMAIL FSGIVMSHYT HHNLSPVTQI LMQQTLRTVA FLCETCVFAF LGLSIFSFPH KFEISFVIWC IVLVLFGRAV NIFPLSYLLN FFRDHKITPK MMFIMWFSGL RGAIPYALSL HLGLEPMEKR QLIGTTTIVI VLFTILLLGG STMPLIRLVD IEDARARRRS KKDVNLSKTE KMGNAIESEH LSELTEEEYE AHYIRQQDLK GFMWLDAKYL NPFFTRRLTQ EDLHHGRIQM KSLTNKWYEE VRQGPSGSED DEQELF **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 System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	NHE8 (SLC9A8)
Alternative Name:	Slc9a8 (SLC9A8 Products)
Background:	Sodium/hydrogen exchanger 8 (Na(+)/H(+) exchanger 8) (NHE-8) (Solute carrier family 9 member 8),FUNCTION: Na(+)/H(+) antiporter. Mediates the electoneutral exchange of intracellular H(+) ions for extracellular Na(+) in 1:1 stoichiometry. Acts as an Na(+)/H(+) exchanger in the trans-Golgi. Contributes to the regulation of pH regulation of Golgi apparatus, and consequently, in protein trafficking and endosomal morphology (By similarity). Plays a crucial role in germ cells in acrosome biogenesis and sperm development, probably by playing a role in the fusion of the Golgi-derived vesicles that form the acrosomal cap (PubMed:28476888, PubMed:25472965). Can also be active at the cell surface of specialized cells. In the small intestine, plays a major physiological role in transepithelial absorption of Na(+). Regulates intracellular pH homeostasis of intestinal epithelial cells (By similarity). Acts as an important regulator of mucosal integrity in the intestine and in the stomach, could mediate the pH fluctuation necessary for mucin exocytosis or assist membrane trafficking of other proteins (PubMed:26505975, PubMed:23657568, PubMed:23220221). Plays a role in photoreceptor survival and in the maintenance of intracellular pH homeostasis in retinal pigment epithelium (RPE cells) (PubMed:29958869, PubMed:25377091). {ECO:0000250|UniProtKB:Q9Y2E8, ECO:0000269|PubMed:23220221, ECO:0000269|PubMed:23657568, ECO:0000269|PubMed:25377091, ECO:0000269|PubMed:25472965, ECO:0000269|PubMed:26505975, ECO:0000269|PubMed:28476888, ECO:0000269|PubMed:29958869}.
Molecular Weight:	64.7 kDa
UniProt:	Q8R4D1
Pathways:	Proton 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.

Application Details

	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