Datasheet for ABIN3116561

SLC5A8 Protein (AA 1-610) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SLC5A8
Protein Characteristics:	AA 1-610
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC5A8 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MDTPRGIGTF VVWDYVVFAG MLVISAAIGI YYAFAGGGQQ TSKDFLMGGR RMTAVPVALS LTASFMSAVT VLGTPSEVYR FGAIFSIFAF TYFFVVVISA EVFLPVFYKL GITSTYEYLE LRFNKCVRLC GTVLFIVQTI LYTGIVIYAP ALALNQVTGF DLWGAVVATG VVCTFYCTLG GLKAVIWTDV FQVGIMVAGF ASVIIQAVVM QGGISTILND AYDGGRLNFW NFNPNPLQRH TFWTIIIGGT FTWTSIYGVN QSQVQRYISC KSRFQAKLSL YINLVGLWAI LTCSVFCGLA LYSRYHDCDP WTAKKVSAPD QLMPYLVLDI LQDYPGLPGL FVACAYSGTL STVSSSINAL AAVTVEDLIK PYFRSLSERS LSWISQGMSV VYGALCIGMA ALASLMGALL QAALSVFGMV GGPLMGLFAL GILVPFANSI GALVGLMAGF AISLWVGIGA QIYPPLPERT LPLHLDIQGC NSTYNETNLM TTTEMPFTTS VFQIYNVQRT PLMDNWYSLS YLYFSTVGTL VTLLVGILVS LSTGGRKQNL DPRYILTKED FLSNFDIFKK KKHVLSYKSH PVEDGGTDNP AFNHIELNSD QSGKSNGTRL

Product Details

	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).

Product Details

Grade:	custom-made

Target Details

Target:	SLC5A8
Alternative Name:	SLC5A8 (SLC5A8 Products)
Background:	Sodium-coupled monocarboxylate transporter 1 (Apical iodide transporter) (Electrogenic sodium monocarboxylate cotransporter) (Sodium iodide-related cotransporter) (Solute carrier family 5 member 8),FUNCTION: Acts as an electrogenic sodium (Na(+)) and chloride (Cl-)-dependent sodium-coupled solute transporter, including transport of monocarboxylates (short-chain fatty acids including L-lactate, D-lactate, pyruvate, acetate, propionate, valerate and butyrate), mocarboxylate drugs (nicotinate, benzoate, salicylate and 5-aminosalicylate) and ketone bodies (beta-D-hydroxybutyrate, acetoacetate and alpha-ketoisocaproate), with a Na(+):substrate stoichiometry of between 4:1 and 2:1 (PubMed:14966140, PubMed:15090606, PubMed:17178845, PubMed:16805814, PubMed:16729224, PubMed:17526579, PubMed:17245649, PubMed:20211600, PubMed:30604288). Catalyzes passive carrier mediated diffusion of iodide (PubMed:12107270). Mediates iodide transport from the thyrocyte into the colloid lumen through the apical membrane (PubMed:12107270). May be responsible for the absorption of D-lactate and monocarboxylate drugs from the intestinal tract (PubMed:17245649). Acts as a tumor suppressor, suppressing colony formation in colon cancer, prostate cancer and glioma cell lines (PubMed:12829793, PubMed:15867356, PubMed:18037591). May play a critical role in the entry of L-lactate and ketone bodies into neurons by a process driven by an electrochemical Na(+) gradient and hence contribute to the maintenance of the energy status and function of neurons (PubMed:16805814). Mediates sodium-coupled electrogenic transport of pyroglutamate (5-oxo-L-proline) (PubMed:20211600). Can mediate the transport of chloride, bromide, iodide and nitrate ions when the external concentration of sodium ions is reduced (PubMed:19864324). {ECO:0000269|PubMed:12107270, ECO:0000269|PubMed:12829793, ECO:0000269|PubMed:14966140, ECO:0000269|PubMed:15090606, ECO:0000269|PubMed:15867356, ECO:0000269|PubMed:16729224, ECO:0000269|PubMed:16805814, ECO:0000269|PubMed:17178845, ECO:0000269|PubMed:17245649, ECO:0000269|PubMed:17526579, ECO:0000269|PubMed:18037591, ECO:0000269|PubMed:19864324, ECO:0000269|PubMed:20211600, ECO:0000269|PubMed:30604288}.
Molecular Weight:	66.6 kDa

Target Details

UniProt:	Q8N695

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