Datasheet for ABIN3118495

SLC22A11 Protein (AA 1-550) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SLC22A11
Protein Characteristics:	AA 1-550
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC22A11 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MAFSKLLEQA GGVGLFQTLQ VLTFILPCLM IPSQMLLENF SAAIPGHRCW THMLDNGSAV STNMTPKALL TISIPPGPNQ GPHQCRRFRQ PQWQLLDPNA TATSWSEADT EPCVDGWVYD RSVFTSTIVA KWDLVCSSQG LKPLSQSIFM SGILVGSFIW GLLSYRFGRK PMLSWCCLQL AVAGTSTIFA PTFVIYCGLR FVAAFGMAGI FLSSLTLMVE WTTTSRRAVT MTVVGCAFSA GQAALGGLAF ALRDWRTLQL AASVPFFAIS LISWWLPESA RWLIIKGKPD QALQELRKVA RINGHKEAKN LTIEVLMSSV KEEVASAKEP RSVLDLFCVP VLRWRSCAML VVNFSLLISY YGLVFDLQSL GRDIFLLQAL FGAVDFLGRA TTALLLSFLG RRTIQAGSQA MAGLAILANM LVPQDLQTLR VVFAVLGKGC FGISLTCLTI YKAELFPTPV RMTADGILHT VGRLGAMMGP LILMSRQALP LLPPLLYGVI SIASSLVVLF FLPETQGLPL PDTIQDLESQ KSTAAQGNRQ EAVTVESTSL **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:	SLC22A11
Alternative Name:	SLC22A11 (SLC22A11 Products)
Background:	Solute carrier family 22 member 11 (Organic anion transporter 4) (OAT4) (Organic anion:dicarboxylate exchanger OAT4),FUNCTION: Antiporter that mediates the transport of conjugated steroids and other specific organic anions at the basal membrane of syncytiotrophoblast and at the apical membrane of proximal tubule epithelial cells, in exchange for anionic compounds (PubMed:10660625, PubMed:11907186, PubMed:15291761, PubMed:15037815, PubMed:15102942, PubMed:15576633, PubMed:17229912, PubMed:18501590, PubMed:26277985, PubMed:28027879). May be responsible for placental absorption of fetal-derived steroid sulfates such as estrone sulfate (E1S) and the steroid hormone precursor dehydroepiandrosterone sulfate (DHEA-S), as well as clearing waste products and xenobiotics from the fetus (PubMed:12409283). Maybe also be involved in placental urate homeostasis (PubMed:17229912). Facilitates the renal reabsorption of organic anions such as urate and derived steroid sulfates (PubMed:15037815, PubMed:17229912). Organic anion glutarate acts as conteranion for E1S renal uptake (PubMed:15037815, PubMed:17229912). Possible transport mode may also include DHEA-S/E1S exchange (PubMed:28027879). Also interacts with inorganic anions such as chloride and hydroxyl ions, therefore possible transport modes may include E1S/Cl(-), E1S/OH(-), urate/Cl(-) and urate/OH(-) (PubMed:17229912). Also mediates the transport of prostaglandin E2 (PGE2) and prostaglandin F2-alpha (PGF2-alpha) and may be involved in their renal excretion (PubMed:11907186). Also able to uptake anionic drugs, diuretics, bile salts and ochratoxin A (PubMed:10660625, PubMed:26277985). Mediates the unidirectional efflux of glutamate and aspartate (PubMed:28027879). Glutamate efflux down its transmembrane gradient may drive SLC22A11/OAT4-mediated placental uptake of E1S (PubMed:26277985). {ECO:0000269|PubMed:10660625, ECO:0000269|PubMed:11907186, ECO:0000269|PubMed:12409283, ECO:0000269|PubMed:15037815, ECO:0000269|PubMed:15102942, ECO:0000269|PubMed:15291761, ECO:0000269|PubMed:15576633, ECO:0000269|PubMed:17229912, ECO:0000269|PubMed:18501590, ECO:0000269|PubMed:26277985, ECO:0000269|PubMed:28027879, ECO:0000303|PubMed:17229912}.
Molecular Weight:	60.0 kDa
UniProt:	Q9NSA0

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