Datasheet for ABIN3115261

SLC22A6 Protein (AA 1-563) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	SLC22A6
Protein Characteristics:	AA 1-563
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC22A6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MAFNDLLQQV GGVGRFQQIQ VTLVVLPLLL MASHNTLQNF TAAIPTHHCR PPADANLSKN GGLEVWLPRD RQGQPESCLR FTSPQWGLPF LNGTEANGTG ATEPCTDGWI YDNSTFPSTI VTEWDLVCSH RALRQLAQSL YMVGVLLGAM VFGYLADRLG RRKVLILNYL QTAVSGTCAA FAPNFPIYCA FRLLSGMALA GISLNCMTLN VEWMPIHTRA CVGTLIGYVY SLGQFLLAGV AYAVPHWRHL QLLVSAPFFA FFIYSWFFIE SARWHSSSGR LDLTLRALQR VARINGKREE GAKLSMEVLR ASLQKELTMG KGQASAMELL RCPTLRHLFL CLSMLWFATS FAYYGLVMDL QGFGVSIYLI QVIFGAVDLP AKLVGFLVIN SLGRRPAQMA ALLLAGICIL LNGVIPQDQS IVRTSLAVLG KGCLAASFNC IFLYTGELYP TMIRQTGMGM GSTMARVGSI VSPLVSMTAE LYPSMPLFIY GAVPVAASAV TVLLPETLGQ PLPDTVQDLE SRWAPTQKEA GIYPRKGKQT RQQQEHQKYM VPLQASAQEK NGL **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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.

Product Details

	2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	SLC22A6
Alternative Name:	SLC22A6 (SLC22A6 Products)
Background:	Solute carrier family 22 member 6 (Organic anion transporter 1) (hOAT1) (PAH transporter) (hPAHT) (Renal organic anion transporter 1) (hROAT1),FUNCTION: Secondary active transporter that functions as a Na(+)-independent organic anion (OA)/dicarboxylate antiporter where the uptake of one molecule of OA into the cell is coupled with an efflux of one molecule of intracellular dicarboxylate such as 2-oxoglutarate or glutarate (PubMed:9950961, PubMed:11907186, PubMed:11669456, PubMed:14675047, PubMed:22108572, PubMed:23832370, PubMed:28534121). Mediates the uptake of OA across the basolateral side of proximal tubule epithelial cells, thereby contributing to the renal elimination of endogenous OA from the systemic circulation into the urine (PubMed:9887087). Functions as a biopterin transporters involved in the uptake and the secretion of coenzymes tetrahydrobiopterin (BH4), dihydrobiopterin (BH2) and sepiapterin to urine, thereby determining baseline levels of blood biopterins (PubMed:28534121). Transports prostaglandin E2 (PGE2) and prostaglandin F2-alpha (PGF2-alpha) and may contribute to their renal excretion (PubMed:11907186). Also mediates the uptake of cyclic nucleotides such as cAMP and cGMP (PubMed:26377792). Involved in the transport of neuroactive tryptophan metabolites kynurenate (KYNA) and xanthurenate (XA) and may contribute to their secretion from the brain (PubMed:22108572, PubMed:23832370). May transport glutamate (PubMed:26377792). Also involved in the disposition of uremic toxins and potentially toxic xenobiotics by the renal organic anion secretory pathway, helping reduce their undesired toxicological effects on the body (PubMed:11669456, PubMed:14675047). Uremic toxins include the indoxyl sulfate (IS), hippurate/N-benzoylglycine (HA), indole acetate (IA), 3-carboxy-4- methyl-5-propyl-2-furanpropionate (CMPF) and urate (PubMed:14675047, PubMed:26377792). Xenobiotics include the mycotoxin ochratoxin (OTA) (PubMed:11669456). May also contribute to the transport of organic compounds in testes across the blood-testis-barrier (PubMed:35307651).

Target Details

	{ECO:0000269|PubMed:11669456, ECO:0000269|PubMed:11907186, ECO:0000269|PubMed:14675047, ECO:0000269|PubMed:22108572, ECO:0000269|PubMed:23832370, ECO:0000269|PubMed:26377792, ECO:0000269|PubMed:28534121, ECO:0000269|PubMed:35307651, ECO:0000269|PubMed:9887087, ECO:0000269|PubMed:9950961}.
Molecular Weight:	61.8 kDa
UniProt:	Q4U2R8
Pathways:	Dicarboxylic Acid 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. 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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.

Handling

Expiry Date:	Unlimited (if stored properly)

Images

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process

