

Datasheet for ABIN3117637

SLC38A3 Protein (AA 1-504) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	SLC38A3
Protein Characteristics:	AA 1-504
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC38A3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MEAPLQTEMV ELVPNGKHSE GLLPVITPMA GNQRVEDPAR SCMEGKSFLQ KSPSKEPHFT DFEGKTSFGM SVFNLSNAIM GSGILGLAYA MANTGIILFL FLLTAVALLS SYSIHLLLLKS SGVVGIRAYE QLGYRAFGTP GKLAALAIT LQNIGAMSSY LYIHKSELPL VIQTFLNLEE KTSDWYMNGN YLVILVSVTI ILPLALMRQL GYLGYSYGFS LSCMVFFLIA VIYKGFHVPC PLPPNFNNTT GNFSHVEIVK EKVQLQVEPE ASAFCTPSYF TLNSQTAYTI PIMAFVCH PEVLPIYTEL KDPSKKKMQH ISNLSIAVMY IMYFLAALFG YLTFYNGVES ELLHTYSKVD PFDVLILCVR VAVLTAVTLT VPIVLPVRR AIQQMLFPNQ EFSWLRHVLI AVGLLTCINL LVIFAPNILG IFGVIGATSA PFLIFIPAI FYFRIMPTEK EPARSTPKIL ALCFAMLGFL LMTMSLSFII IDWASGTSRH GGNH</p> <p>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</p>

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:	SLC38A3
Alternative Name:	SLC38A3 (SLC38A3 Products)
Background:	<p>Sodium-coupled neutral amino acid transporter 3 (N-system amino acid transporter 1) (Na(+)-coupled neutral amino acid transporter 3) (Solute carrier family 38 member 3) (System N amino acid transporter 1),FUNCTION: Symporter that cotransports specific neutral amino acids and sodium ions, coupled to an H(+) antiporter activity (PubMed:10823827). Mainly participates in the glutamate-GABA-glutamine cycle in brain where it transports L-glutamine from astrocytes in the intercellular space for the replenishment of both neurotransmitters glutamate and gamma-aminobutyric acid (GABA) in neurons and also functions as the major influx transporter in ganglion cells mediating the uptake of glutamine (By similarity). The transport activity is specific for L-glutamine, L-histidine and L-asparagine (PubMed:10823827). The transport is electroneutral coupled to the cotransport of 1 Na(+) and the antiport of 1 H(+) (By similarity). The transport is pH dependent, saturable, Li(+) tolerant and functions in both direction depending on the concentration gradients of its substrates and cotransported ions (PubMed:10823827). Also mediates an amino acid-gated H(+) conductance that is not stoichiometrically coupled to the amino acid transport but which influences the ionic gradients that drive the amino acid transport (By similarity). In addition, may play a role in nitrogen metabolism, amino acid homeostasis, glucose metabolism and renal ammoniagenesis (By similarity). {ECO:0000250 UniProtKB:Q9DCP2, ECO:0000250 UniProtKB:Q9JHZ9, ECO:0000269 PubMed:10823827}.</p>
Molecular Weight:	55.8 kDa
UniProt:	Q99624

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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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</p>

Application Details

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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