Datasheet for ABIN3110448

SLC24A1 Protein (AA 1-1099) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SLC24A1
Protein Characteristics:	AA 1-1099
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC24A1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MGKLIRMGPQ ERWLLRTKRL HWSRLLFLLG MLIIGSTYQH LRRPRGLSSL WAAVSSHQPI KLASRDLSSE EMMMMSSSPS KPSSEMGGKM LVPQASVGSD EATLSMTVEN IPSMPKRTAK MIPTTTKNNY SPTAAGTERR KEDTPTSSRT LTYYTSTSSR QIVKKYTPTP RGEMKSYSPT QVREKVKYTP SPRGRRVGTY VPSTFMTMET SHAITPRTTV KDSDITATYK ILETNSLKRI MEETTPTTLK GMFDSTPTFL THEVEANVLT SPRSVMEKNN LFPPRRVESN SSAHPWGLVG KSNPKTPQGT VLLHTPATSE GQVTISTMTG SSPAETKAFT AAWSLRNPSP RTSVSAIKTA PAIVWRLAKK PSTAPSTSTT PTVRAKLTMQ VHHCVVVKPT PAMLTTPSPS LTTALLPEEL SPSPSVLPPS LPDLHPKGEY PPDLFSVEER RQGWVVLHVF GMMYVFVALA IVCDEYFVPA LGVITDKLQI SEDVAGATFM AAGGSAPELF TSLIGVFISH SNVGIGTIVG SAVFNILFVI GTCSLFSREI LNLTWWPLFR DVSFYILDLI MLILFFLDSL IAWWESLLLL LAYAFYVFTM KWNKHIEVWV KEQLSRRPVA KVMALEDLSK PGDGAIAVDE LQDNKKLKLP SLLTRGSSST SLHNSTIRST

IYQLMLHSLD PLREVRLAKE KEEESLNQGA RAQPQAKAES KPEEEEPAKL PAVTVTPAPV PDIKGDQKEN PGGQEDVAEA ESTGEMPGEE GETAGEGETE EKSGGETQPE GEGETETQGK GEECEDENEA EGKGDNEGED EGEIHAEDGE MKGNEGETES QELSAENHGE AKNDEKGVED GGGSDGGDSE EEEEEEEEQE EEEEEEEQEE EEEEEEEEEE KGNEEPLSLD WPETRQKQAI YLFLLPIVFP LWLTVPDVRR QESRKFFVFT FLGSIMWIAM FSYLMVWWAH QVGETIGISE EIMGLTILAA GTSIPDLITS VIVARKGLGD MAVSSSVGSN IFDITVGLPV PWLLFSLING LQPVPVSSNG LFCAIVLLFL MLLFVISSIA SCKWRMNKIL GFTMFLLYFV FLIISVMLED RIISCPVSV

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.

Product Details

- 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:	SLC24A1
Alternative Name:	SLC24A1 (SLC24A1 Products)
Background:	Sodium/potassium/calcium exchanger 1 (Na(+)/K(+)/Ca(2+)-exchange protein 1) (Retinal rod Na-Ca+K exchanger) (Solute carrier family 24 member 1),FUNCTION: Calcium, potassium:sodium antiporter that transports 1 Ca(2+) and 1 K(+) in exchange for 4 Na(+) (PubMed:26631410). Critical component of the visual transduction cascade, controlling the calcium concentration of outer segments during light and darkness (PubMed:20850105). Light causes a rapid lowering of cytosolic free calcium in the outer segment of both retinal rod and cone photoreceptors and the light-induced lowering of calcium is caused by extrusion via this protein which plays a key role in the process of light adaptation (PubMed:20850105). {ECO:0000269|PubMed:20850105, ECO:0000269|PubMed:26631410}.
Molecular Weight:	121.4 kDa
UniProt:	O60721
Pathways:	Phototransduction

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