Datasheet for ABIN3103593

AQP11 Protein (AA 1-271) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	AQP11
Protein Characteristics:	AA 1-271
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AQP11 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MSPLLGLRSE LQDTCTSLGL MLSVVLLMGL ARVVARQQLH RPVAHAFVLE FLATFQLCCC THELQLLSEQ HPAHPTWTLT LVYFFSLVHG LTLVGTSSNP CGVMMQMMLG GMSPETGAVR LLAQLVSALC SRYCTSALWS LGLTQYHVSE RSFACKNPIR VDLLKAVITE AVCSFLFHSA LLHFQEVRTK LRIHLLAALI TFLVYAGGSL TGAVFNPALA LSLHFMCFDE AFPQFFIVYW LAPSLGILLM ILMFSFFLPW LHNNHTINKK E **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.

Product Details

- 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:	AQP11
Alternative Name:	AQP11 (AQP11 Products)

Target Details

Background:	Aquaporin-11 (AQP-11),FUNCTION: Channel protein that facilitates the transport of water, glycerol and hydrogen peroxide across membrane of cell or organelles guaranteeing intracellular homeostasis in several organes like liver, kidney and brain (PubMed:24845055, PubMed:24918044, PubMed:31546170). In situation of stress, participates in endoplasmic reticulum (ER) homeostasis by regulating redox homeostasis through the transport of hydrogen peroxide across the endoplasmic reticulum membrane thereby regulating the oxidative stress through the NADPH oxidase 2 pathway (PubMed:31546170). Plays a role by maintaining an environment suitable for translation or protein foldings in the ER lumen namely by participating in the PKD1 glycosylation processing resulting in regulation of PKD1 membrane trafficking thereby preventing the accumulation of unfolding protein in ER (By similarity). Plays a role in the proximal tubule function by regulating its endosomal acidification (By similarity). May play a role in postnatal kidney development (By similarity). {ECO:0000250|UniProtKB:Q8BHH1, ECO:0000269|PubMed:24845055, ECO:0000269|PubMed:24918044, ECO:0000269|PubMed:31546170}.
Molecular Weight:	30.2 kDa
UniProt:	Q8NBQ7

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