

Datasheet for ABIN3136030

## SLC20A2 Protein (AA 1-656) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	SLC20A2
Protein Characteristics:	AA 1-656
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC20A2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AlIcE®
Sequence:	<p>MAMDGYLWMV ILGFIIAFIL AFSVGANDVA NSFGTAVGSG VVTLRQACIL ASIFETTGSV  LLGAKVGETI RKGIIIDVNLY NETVETLMAG EVSAMVGSAV WQLIASFLRL PISGTHCIVG  STIGFSLVAI GPKGVSQWML VKIVASWFIS PLLSGFMSGV LFILIRMFIL TKEDPVPNGL  QALPLFYAAT IAINVFSIMY TGAPVLGLSL PIWAIALISF GVALLFAFFV WLFVCPWMKR  KIAGRLEKES ALSRASDESL RKVQEAESPG FKELPGAKPS DDSAVPLTSL AGEAVGASEG  TSAGNHPRAS YGRALSMTHG SAKSPISNGT FGFEGHMRND GHVYHTVHKD SGLYKDLLHK  IHVDRGSEEK PTQENNYRLL RRNNSYTCYT AAICGMPVHT TFRASDTSSA PEDSEKLVGD  SVSYSKKRLR YDSYSSYCNA VAEAEIEAEE GGVEMRLASE LADPDRPHED PTEEEKEEKD  SAEVHLLFHF LQVL TACFGS FAHGGNDVSN AIGPLVALWL IYQGGVTQE AATPVWLLFY  GGVGICTGLW VWGRRVIQTM GKDLTPITPS SGFTIELASA FTVVIASNIG LPVSTTHCKV  GSVVAVGWIR SRKAVDWRLF RNIFVAWFVT VPVAGLFSAA IMALLMYICG LFSSSR</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 have a special request, please contact us.**

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### 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.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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### Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

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## Product Details

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Grade: custom-made

## Target Details

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Target: SLC20A2

Alternative Name: Slc20a2 ([SLC20A2 Products](#))

Background: Sodium-dependent phosphate transporter 2 (Phosphate transporter 2) (PiT-2) (Solute carrier family 20 member 2) (Type III sodium-dependent phosphate transporter),FUNCTION: Sodium-phosphate symporter which preferentially transports the monovalent form of phosphate with a stoichiometry of two sodium ions per phosphate ion (PubMed:11003594, PubMed:23968976, PubMed:26822507, PubMed:30721528). Plays a critical role in the determination of bone quality and strength by providing phosphate for bone mineralization (PubMed:30721528). Required to maintain normal cerebrospinal fluid phosphate levels (PubMed:26822507). Mediates phosphate-induced calcification of vascular smooth muscle cells (VCMCs) and can functionally compensate for loss of SLC20A1 in VCMCs (PubMed:23968976). {ECO:0000269|PubMed:11003594, ECO:0000269|PubMed:23968976, ECO:0000269|PubMed:26822507, ECO:0000269|PubMed:30721528}.

Molecular Weight: 70.9 kDa

UniProt: [Q80UP8](#)

## Application Details

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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.

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Application Details

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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months