

Datasheet for ABIN3127271

## SLC44A4 Protein (AA 1-707) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	SLC44A4
Protein Characteristics:	AA 1-707
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC44A4 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MGRKQNEEA HGNSAKYDPS FRGPIKNRGC TDIICCVLFL IFILGYIIVG LVAWVYGDPR</p> <p>QVLYPRNSTG AYCGVGDNDK KPYVLYFDIL SCAAAINIIS IAENGLQCPT PQVCVSSCPL</p> <p>APWAVEVFQF SKTVGEVYGE RRNFCLPAVS PDMIVEESLQ KGLCPRFLLP STPALGRCFP</p> <p>LPNINFTLPE DLRINNTTVS NGISGLLDSI NARDVSVKIF EDFAQSWYWI LVALGVALAL</p> <p>SLLFILLRL VAAPLVLLLI VGVLAFLAYG IYHCWQQYQV FRDKGASITQ LGFTTNFSAY</p> <p>QSVKETWLAA LIVLAVLEGI LLLMLIFLRQ RIRIAIALLK EASRAVGQMM STMFYPLVTF</p> <p>VLLVICIGYW AVTALYLATS GQPQYIY WAS NTSTPGCENV PVNMTCDPMA PLNSSCPNLK</p> <p>CVFKGYSTTG LAQRSLFNLQ IYGVLGFWT VNWWLALGQC VLAGAFASFY WAFHKPRDIP</p> <p>TFPLSSAFIR TLRHYTGSLA FGALILSLVQ IARVILEYID HKLRGSQNPV ARCIICCFKC CLWCLEKFIK</p> <p>FLNRNAYIMI AIYGKNFCVS AKNAFMLLMR NVLRVWVLDK VTDLLLFFGK LLVGGVGVVL</p> <p>SFFFFSGRIK GLGKDFENPN LNYWLPIMT SIMGAYVIAS GFFSVFGMCV DTLFLCFLED</p>

LERNDGSQER PYYMPKALLK ILGKKNEAPT GGKTRKK

**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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## Product Details

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

Grade: custom-made

## Target Details

Target: SLC44A4

Alternative Name: Slc44a4 ([SLC44A4 Products](#))

Background: Choline transporter-like protein 4 (Solute carrier family 44 member 4) (Thiamine pyrophosphate transporter 1) (mTPPT1),FUNCTION: Choline transporter that plays a role in the choline-acetylcholine system and is required to the efferent innervation of hair cells in the olivocochlear bundle for the maintenance of physiological function of outer hair cells and the protection of hair cells from acoustic injury (By similarity). Also described as a thiamine pyrophosphate transporter in colon, may mediate the absorption of microbiota-generated thiamine pyrophosphate and contribute to host thiamine (vitamin B1) homeostasis (PubMed:24379411). {ECO:0000250|UniProtKB:Q53GD3, ECO:0000250|UniProtKB:Q7T2B0, ECO:0000269|PubMed:24379411}.

Molecular Weight: 78.7 kDa

UniProt: [Q91VA1](#)

## 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.

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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!

## Application Details

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Restrictions: For Research Use only

## Handling

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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