

Datasheet for ABIN3134551

## SLC12A3 Protein (AA 1-1002) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	SLC12A3
Protein Characteristics:	AA 1-1002
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC12A3 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

### Product Details

Brand:	AliCE®
Sequence:	MAELPVTELP GDALCSGRFT ISTLMGGDEP PPAACDSSQP SHLTHGSTLY MRTFGYNTID VVPAYEHYAN SALPGEPRKV RPTLADLHSF LKQEGSHLHA LAFDGRQGRE LTDGLVEDET GTNSEKSPGE PVRFGWVKGV MIRCMLNIWG VILYLRLPWI TAQAGIVLTW LIILLSVMVT SITGLSISAI STNGKVKSGG TYFLISRSLG PELGGSIGLI FAFANAVGVA MHTVGFAETV RDLLQEYGTP IVDPIINDIRI IGVVTVTVLL AISLAGMEWE SKAQVLFFLV IMVSFANYLV GTLIPASEDK ASKGFYSYHG DIFVQNLVPD WRGIDGSFFG MFSIFFPSAT GILAGANISG DLKDDPAVAIP KGTLMAIFWT TISYLAISAT IGSCVVRDAS GDVNDTMTTPG PGPCEGLACG YGWNFTECSQ QRSCRYGLIN YYQTMSMVSA FAPLITAGIF GATLSSALAC LVSAAKVFQC LCEDQLYPLI GFFGKGYGKN REPVRGYLLA YAIIVAFIII AELNTIPII SNFFLC SYAL INFSCFHASI TNSPGWRPSF RYYSKWAALF GAVISVIMF LLTWWAALIA IGVVLFLLLY VIYKKPEVNW GSSVQAGSYN LALSYSVGLN EVEDHIKNYR PQCLVLTGPP NFRPALVDFV STFTQNLSLM

ICGHVLIGPG QQRVPELRLI ASGHTKWLNK RKIKAFYSDV IAEDLRSGVQ ILMQASGLGR  
MKPNILVVG F KRNWQSAHPA TVEDYIGVLH DAFDFNYGVC VMRMREGLNV SEALQTHHTP  
EALIQEEQAS TIFQSEQGKK TIDIYWLFDD GGLTLLIPYL LHRKKRWGKC KIRVFVGGQI  
NRMDEERKAI ISLLSKFRLG FHEVHVLPDI NQKPQAEHTK RFEDMIAPFR LNDGFKDEAT  
VTEMRRDCPW KISDEEINKN RIKSLRQVRL SEILLDYSRD AALIILTLPI GRKGKCPSSL  
YMAWLETLSQ DLRPPVLLIR GNQENVLTFY CQ

**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.

## Product Details

- 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: SLC12A3

Alternative Name: Slc12a3 ([SLC12A3 Products](#))

Background: Solute carrier family 12 member 3 (Na-Cl symporter) (Thiazide-sensitive sodium-chloride cotransporter),FUNCTION: Electroneutral sodium and chloride ion cotransporter, which acts as a key mediator of sodium and chloride reabsorption in kidney distal convoluted tubules (PubMed:15068971, PubMed:17488636, PubMed:19633012, PubMed:36370249). Also acts as a receptor for the pro-inflammatory cytokine IL18, thereby contributing to IL18-induced cytokine production, including IFNG, IL6, IL18 and CCL2 (PubMed:26099046). May act either independently of IL18R1, or in a complex with IL18R1 (PubMed:26099046).  
{ECO:0000269|PubMed:15068971, ECO:0000269|PubMed:17488636, ECO:0000269|PubMed:19633012, ECO:0000269|PubMed:26099046, ECO:0000269|PubMed:36370249}.

Molecular Weight: 110.7 kDa

UniProt: [P59158](#)

## 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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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