

Datasheet for ABIN3113964

## SLC12A2 Protein (AA 1-1212) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	SLC12A2
Protein Characteristics:	AA 1-1212
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC12A2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	MEPRPTAPSS GAPGLAGVGE TPSAAALAAA RVELPGTAVP SVPEDAAPAS RDGGGV RDEG PAAAGDGLGR PLGPTPSQSR FQVDLVSENA GRAAAAAAAAAA AAAAAAGAG AGAKQTPADG EASGESEPAK GSEEAKGRFR VNFVDP AASS SAEDSLSDAA GVGVDGPNVS FQNGGDTVLS EGSSLHSGGG GSGGHHQHYY YDTHNTYYL RTFGHNTMDA VPRIDHYRHT AAQLGEKLLR PSLAELHDEL EKEPFEDGFA NGEESTPTRD AVVTYTAESK GVVKFGWIKG VLVRCMLNIW GVMLFIRLSW IVGQAGIGLS VLVIMMATVV TTITGLSTSA IATNGFVRGG GAYYLISRSL GPEFGGAIGL IFAFANAVAV AMYVVGFAET VVELLKEHSI LMIDEINDIR IIGAITVVIL LGISVAGMEW EAKAQIVLLV ILLLAIGDFV IGTFIPLESK KPKGFFGYKS EIFNENFGPD FREEETFFSV FAIFFPAATG ILAGANISGD LADPQSAIPK GTLLAILITT LVYVGIAVSV GSCVVRDATG NVNDTIVTEL TNCTSAACKL NFD FSSCESS PCSYGLMNNF QVMSMVSGFT PLISAGIFSA TLSSALASLV SAPKIFQALC KDNIIYPAFQM FAKGYGKNE PLRGYILTFL IALGFILIAE LNVIAPIISN FFLASYALIN

FSVFHASLAK SPGWRPAFKY YNMWISLLGA ILCCIVMFVI NWWAALLTYV IVLGLYIYVT  
YKKPDVNWGS STQALTYLNA LQHSIRLSGV EDHVKNFRPQ CLVMTGAPNS RPALLHLVHD  
FTKNVGLMIC GHVHMGP RRQ AMKEMSIDQA KYQRWLIK NK MKAFYAPVHA DDLREGAQYL  
MQAAGLGRMK PNTLV LGFKK DWLQADMRDV DMYINLFHDA FDIQYGVVVI RLKEGLDISH  
LQGQEELLSS QEKSPGTDV VVSVEYSKKS DLDTSKPLSE KPITHKVEEE DGKTATQPLL  
KKEKSGPIVP LNVADQKLE ASTQFQKKQG KNTIDVWWLF DDGGLTLLIP YLLTTKKKWK  
DCKIRVFIGG KINRIDHRR AMATLLSKFR IDFSDIMVLG DINTKPKKEN IIAFEEIIEP YRLHEDDKEQ  
DIADKMKED E PWRTDNELE LYKTKTYRQI RLNELLKEHS STANIIVMSL PVARKGAVSS  
ALYMAWLEAL SKDLPPILLV RGNHQSVLTF YS

**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!

## Product Details

### 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: SLC12A2

Alternative Name: SLC12A2 ([SLC12A2 Products](#))

Background: Solute carrier family 12 member 2 (Basolateral Na-K-Cl symporter) (Bumetanide-sensitive sodium-(potassium)-chloride cotransporter 2),FUNCTION: Cation-chloride cotransporter which mediates the electroneutral transport of chloride, potassium and/or sodium ions across the membrane (PubMed:32081947, PubMed:33597714, PubMed:32294086, PubMed:7629105, PubMed:16669787). Plays a vital role in the regulation of ionic balance and cell volume (PubMed:32081947, PubMed:32294086, PubMed:7629105, PubMed:16669787).  
{ECO:0000269|PubMed:16669787, ECO:0000269|PubMed:32081947, ECO:0000269|PubMed:32294086, ECO:0000269|PubMed:33597714, ECO:0000269|PubMed:7629105}.

Molecular Weight: 131.4 kDa

UniProt: [P55011](#)

Pathways: [Sensory Perception of Sound](#)

## 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

Application Details

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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 <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