

Datasheet for ABIN3137549

## SLC12A7 Protein (AA 1-1083) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	SLC12A7
Protein Characteristics:	AA 1-1083
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC12A7 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MPTNFTVVPV EARADGAGDE AAERTEEPES PESVDQTSPT PGDGNPRENS PFINNVEVER</p> <p>ESYFEGKNMA LFEEEMDSNP MVSSLLNKLA NYTNLSQGVV EHEEEDSRR REVKAPRMGT</p> <p>FIGVYLPCLQ NILGVILFLR LTWIVGAAGV MESFLIVAMC CTCTMLTAIS MSAIATNGVV</p> <p>PAGGSYYMIS RSLGPEFGGA VGLCFYLGTT FAGAMYILGT IEIFLTYISP SAAIFQAETA</p> <p>DGEAAALLNN MRVYGSCALA LMAVVVFVGV KYVNKLALVF LACVVSILA IYAGVIKTA</p> <p>APPDIPVCLL GNRTLNRNF DCAKMQVVS NGTVTTALWR LFCNGSSLGA TCDEYFAQNN</p> <p>VTEIQGIPGV ASGVFLDNLW STYSDKGAFV EKKGVSSVPV SEESRPGGLP YVLTDMITYF</p> <p>TMLVGIYFPS VTGIMAGSNR SGDLKDAQKS IPTGTILAIV TTSFIYLSI VLFGACIEGV</p> <p>VLRDKFGEAL QGNLVIGMLA WPSPWVIVIG SFFSTCGAGL QSLTGAPRL QAIARDGIIP</p> <p>FLQVFGHGKA NGEPTWALLL TALICETGIL IASLDSVAPI LSMFFLMCYM FVNLACAVQT</p> <p>LLRTPNWRPR FKFYHWTLSF LGMSLCLALM FICSWYYALF AMLIAGCIYK YIEYRGAEKE</p>

WGDGIRGLSL NAARYALLRV EHGPPHTKNW RPQVLVMLNL DSEQCVKHPR LLSFTSQLKA  
GKGLTIVGSV LEGTYLDKHV EAQRAEENIR SLMSAEKTKG FCQLVVSSNL RDGASHLIQS  
AGLGGMKHNT VLMAWPEAWK EADNPFSWKN FVDTVRDTTA AHQALLVAKN IDLFPQNQER  
FSDGNIDVWW IVHDGGMLML LPFLLRQHKV WRKCRMRIFT VAQVDDNSIQ MKKDLQMFLY  
HLRISAEVEV VEMVENDISA FTYEKTLMME QRSQMLKQMQ LSKNEREREA QLIHDRNTAS  
HTTATARTQA PPTPDKVQMT WTKEKLIAEK HRNKDTGPSG FKDLFSLKPD QSNVRRMHTA  
VKLNGVVLNK SQDAQLVLLN MPGPPKSRQG DENYMEFLEV LTEGLNRVLL VRGGGREVIT IYS

**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.

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- 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:	SLC12A7
Alternative Name:	Slc12a7 ( <a href="#">SLC12A7 Products</a> )
Background:	Solute carrier family 12 member 7 (Electroneutral potassium-chloride cotransporter 4) (K-Cl cotransporter 4),FUNCTION: Mediates electroneutral potassium-chloride cotransport when activated by cell swelling (PubMed:11551954, PubMed:12106695). May mediate K(+) uptake into Deiters' cells in the cochlea and contribute to K(+) recycling in the inner ear. Important for the survival of cochlear outer and inner hair cells and the maintenance of the organ of Corti (PubMed:11976689). May be required for basolateral Cl(-) extrusion in the kidney and contribute to renal acidification (Probable). {ECO:0000269 PubMed:11551954, ECO:0000269 PubMed:11976689, ECO:0000269 PubMed:12106695, ECO:0000305}.
Molecular Weight:	119.5 kDa
UniProt:	<a href="#">Q9WVL3</a>

## 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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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</p>

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 **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