

Datasheet for ABIN3137549  
**SLC12A7 Protein (AA 1-1083) (rho-1D4 tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	SLC12A7
Protein Characteristics:	AA 1-1083
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC12A7 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys)

## Product Details

Sequence:	MPTNFTVVPV EARADGAGDE AAERTEEPES PESVDQTSPT PGDGNPRENS PFINNVEVER ESYFEGKNMA LFEEMDSNP MVSSLLNKLA NYTNLSQGVV EHEEDEDSSR REVKAPRMGT FIGVYLPCLQ NILGVILFLR LTWIVGAAGV MESFLIVAMC CTCTMLTAIS MSAIATNGVV PAGGSYYMIS RSLGPEFGGA VGLCFYLGTT FAGAMYILGT IEIFLTYISP SAAIFQAETA DGEAAALLNN MRVYGSCALA LMAVVVFGV KYVNKLALVF LACVVLSILA IYAGVIKTAF APPDIPVCLL GNRTLNRNF DCAKMQVVS NGTVTTALWR LFCNGSSLGA TCDEYFAQNN VTEIQGIPGV ASGVFLDNLW STYSDKGAFV EKKGVSSVPV SEESRPGGLP YVLTDMITYF TMLVGIYFPS VTGIMAGSNR SGDLKDAQKS IPTGTILAIV TTSFIYLSI VLFGACIEGV VLRDKFGEAL QGNLVIGMLA WPSPWVIVIG SFFSTCGAGL QSLTGAPRL QAIARDGIIP FLQVFGHGKA NGEPTWALLL TALICETGIL IASLDSVAPI LSMFFLMCYM FVNLACAVQT LLRTPNWRPR FKFYHWTLSF LGMSLCLALM FICSWYYALF AMLIAGCIYK YIEYRGAEKE WGDGIRGLSL NAARYALLRV EHGPPTHKNW RPQVLVMLNL DSEQCVKHPR LLSFTSQLKA
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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 PTPDKVQMT WTKEKLIAEK HRNKDTGPSG FKDLFSLKPD QSNVRRMHTA  
VKLNGVVLNK SQDAQLVLLN MPGPPKSRQG DENYMEFLEV LTEGLNRVLL VRGGGREVIT IYS

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Slc12a7 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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### Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractionated by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate

## Product Details

fractions are analyzed by Western blot.

3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

## Target Details

Target: SLC12A7

Alternative Name: Slc12a7 ([SLC12A7 Products](#))

Background: Mediates electroneutral potassium-chloride cotransport when activated by cell swelling (By similarity). 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. May be required for basolateral Cl(-) extrusion in the kidney and contribute to renal acidification. {ECO:0000250, ECO:0000269|PubMed:11976689}.

Molecular Weight: 120.7 kDa Including tag.

UniProt: [Q9WVL3](#)

## 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: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process