

# Datasheet for ABIN7544832 SLC46A2 Protein (AA 1-475) (His tag)



### Overview

Quantity:	1 mg
Target:	SLC46A2
Protein Characteristics:	AA 1-475
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC46A2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Purpose:	Custom-made recombinat SLC46A2 Protein expressed in mammalien cells.
Sequence:	MSPEVTCPRR GHLPRFHPRT WVEPVVASSQ VAASLYDAGL LLVVKASYGT GGSSNHSASP
	SPRGALEDQQ QRAISNFYII YNLVVGLSPL LSAYGLGWLS DRYHRKISIC MSLLGFLLSR
	LGLLLKVLLD WPVEVLYGAA ALNGLFGGFS AFWSGVMALG SLGSSEGRRS VRLILIDLML
	GLAGFCGSMA SGHLFKQMAG HSGQGLILTA CSVSCASFAL LYSLLVLKVP ESVAKPSQEL
	PAVDTVSGTV GTYRTLDPDQ LDQQYAVGHP PSPGKAKPHK TTIALLFVGA IIYDLAVVGT
	VDVIPLFVLR EPLGWNQVQV GYGMAAGYTI FITSFLGVLV FSRCFRDTTM IMIGMVSFGS
	GALLLAFVKE TYMFYIARAV MLFALIPVTT IRSAMSKLIK GSSYGKVFVI LQLSLALTGV
	VTSTLYNKIY QLTMDMFVGS CFALSSFLSF LAIIPISIVA YKQVPLSPYG DIIEK Sequence without
	tag. The proposed Purification-Tag is based on experiences 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.

### **Product Details**

#### Characteristics:

Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

### **Target Details**

Target:

SLC46A2

Alternative Name:

SLC46A2 (SLC46A2 Products)

Background:

Solute carrier family 46 member 2 (Thymic stromal cotransporter homolog), FUNCTION: Proton-coupled transporter that delivers pathogen-associated or danger-associated molecular patterns to cytosolic pattern recognition receptors as part of the innate immune response to microbes or tissue injury (PubMed:28539433, PubMed:34235268). Has selectivity toward muropeptides that contain the amino acid diaminopimelic acid (DAP-type peptidoglycan muropeptides) including Tri-DAP and tracheal toxin (TCT), common in Gram-negative bacteria and Gram-positive bacilli. In the context of immune recognition of skin microbiota, shuttles bacterial muropeptides across the endolysosomal membranes into the cytosol for recognition by NOD1, triggering MYD88-dependent secretion of IL1A and neutrophil recruitment in a pyroptosis-type inflammatory process (PubMed:28539433). To a lesser extent and redundantly, transports muramyl dipeptides derived from most bacterial proteoglycans, eliciting NOD2 receptor activation and downstream inflammatory responses (PubMed:28539433). Postulated to function as a dominant importer of cyclic GMP-AMP dinucleotides (cGAMPs) in monocyte and

macrophage cell lineages. Selectively imports cGAMPs derived from pathogenic bacteria such as 3'3'-cGAMP thus providing for differential immune recognition of pathogenic versus commensal bacteria. During tumorigenesis may transport extracellular tumor-derived 2'3'-cGAMP across the plasma membrane of M1-polarized macrophages to activate the antitumoral stimulator of interferon genes (STING) pathway (PubMed:34235268). The transport mechanism, its electrogenicity and stoichiometry remain to be elucidated (Probable). {ECO:0000269|PubMed:28539433, ECO:0000269|PubMed:34235268, ECO:0000305}.

Molecular Weight:

51.1 kDa

UniProt:

Q9BY10

### **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.

Restrictions:

For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months