

## Datasheet for ABIN3113925

# SLC18A1 Protein (AA 1-525) (Strep Tag)



#### Go to Product page

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Quantity:	250 μg
Target:	SLC18A1
Protein Characteristics:	AA 1-525
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC18A1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MLRTILDAPQ RLLKEGRASR QLVLVVVFVA LLLDNMLFTV VVPIVPTFLY DMEFKEVNSS
	LHLGHAGSSP HALASPAFST IFSFFNNNTV AVEESVPSGI AWMNDTASTI PPPATEAISA
	HKNNCLQGTG FLEEEITRVG VLFASKAVMQ LLVNPFVGPL TNRIGYHIPM FAGFVIMFLS
	TVMFAFSGTY TLLFVARTLQ GIGSSFSSVA GLGMLASVYT DDHERGRAMG TALGGLALGL
	LVGAPFGSVM YEFVGKSAPF LILAFLALLD GALQLCILQP SKVSPESAKG TPLFMLLKDP
	YILVAAGSIC FANMGVAILE PTLPIWMMQT MCSPKWQLGL AFLPASVSYL IGTNLFGVLA
	NKMGRWLCSL IGMLVVGTSL LCVPLAHNIF GLIGPNAGLG LAIGMVDSSM MPIMGHLVDL
	RHTSVYGSVY AIADVAFCMG FAIGPSTGGA IVKAIGFPWL MVITGVINIV YAPLCYYLRS
	PPAKEEKLAI LSQDCPMETR MYATQKPTKE FPLGEDSDEE PDHEE
	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.

#### 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 posttranslational 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.
- 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:	SLC18A1
Alternative Name:	SLC18A1 (SLC18A1 Products)
Background:	Chromaffin granule amine transporter (Solute carrier family 18 member 1) (Vesicular amine
	transporter 1) (VAT1),FUNCTION: [Isoform 1]: Electrogenic antiporter that exchanges one
	cationic monoamine with two intravesicular protons across the membrane of secretory and
	synaptic vesicles. Uses the electrochemical proton gradient established by the V-type proton-
	pump ATPase to accumulate high concentrations of monoamines inside the vesicles prior to
	their release via exocytosis. Transports catecholamines and indolamines with higher affinity for
	serotonin (PubMed:23337945, PubMed:8643547, PubMed:16326835). Regulates the
	transvesicular monoaminergic gradient that determines the quantal size. Mediates presynaptic
	monoaminergic vesicle transport in the amygdala and prefrontal brain regions related with
	emotion processing in response to environmental stimuli (PubMed:23337945).
	{ECO:0000269 PubMed:16326835, ECO:0000269 PubMed:23337945,
	ECO:0000269 PubMed:8643547}., FUNCTION: [Isoform 2]: Unable to uptake serotonin.
	{ECO:0000269 PubMed:16326835}.
Molecular Weight:	56.3 kDa
UniProt:	P54219
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
	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!
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