

Datasheet for ABIN3134098 **SYT2 Protein (AA 1-422) (Strep Tag)**



Overview

Quantity:	250 μg
Target:	SYT2
Protein Characteristics:	AA 1-422
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SYT2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

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Product Details	
Brand:	AliCE®
Sequence:	MRNIFKRNQE PNVAPATTTA TMPLAPVAPA DNSTESTGPG ESQEDMFAKL KEKFFNEINK
	IPLPPWALIA MAVVAGLLLL TCCFCICKKC CCKKKKNKKE KGKGMKNAMN MKDMKGGQDD
	DDAETGLTEG EGEGEEEKEP ENLGKLQFSL DYDFQANQLT VGVLQAAELP ALDMGGTSDP
	YVKVFLLPDK KKKYETKVHR KTLNPAFNET FTFKVPYQEL AGKTLVMAIY DFDRFSKHDI
	IGEVKVPMNT VDLGQPIEEW RDLQGGEKEE PEKLGDICTS LRYVPTAGKL TVCILEAKNL
	KKMDVGGLSD PYVKIHLMQN GKRLKKKKTT VKKKTLNPYF NESFSFEIPF EQIQKVQVVV
	TVLDYDKLGK NEAIGKIFVG SNATGTELRH WSDMLANPRR PIAQWHSLKP EEEVDALLGK NK
	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:	SYT2

Target Details

Alternative Name:	Syt2 (SYT2 Products)
Background:	Synaptotagmin-2 (Inositol polyphosphate-binding protein) (IP4-binding protein) (IP4BP)
	(Synaptotagmin II) (SytII),FUNCTION: Exhibits calcium-dependent phospholipid and inositol
	polyphosphate binding properties (PubMed:7961887). May have a regulatory role in the
	membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse
	(PubMed:7961887). Plays a role in dendrite formation by melanocytes (By similarity).
	{ECO:0000250 UniProtKB:Q8N9I0, ECO:0000269 PubMed:7961887}., FUNCTION: (Microbial
	infection) Receptor for C.botulinum neurotoxin type B (BoNT/B, botB), interaction is improved i
	the presence of gangliosides (PubMed:14504267). The toxin binds via the vesicular domain
	(residues 47-60) (PubMed:14504267, PubMed:17167418, PubMed:23807078).
	{ECO:0000269 PubMed:14504267, ECO:0000269 PubMed:17167418,
	ECO:0000269 PubMed:23807078}., FUNCTION: (Microbial infection) Receptor for C.botulinum
	neurotoxin type G (BoNT/G, botG), gangliosides are not required for (or only very slightly
	improve) binding to a membrane-anchored receptor fragment (PubMed:20219474). The toxin
	binds via the vesicular domain (residues 47-55) (PubMed:20219474).
	{ECO:0000269 PubMed:20219474}.
Molecular Weight:	47.3 kDa
UniProt:	P46097
Pathways:	Synaptic Vesicle Exocytosis
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.
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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