



Datasheet for ABIN3118499

**ST6GALNAC1 Protein (AA 1-600) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	ST6GALNAC1
Protein Characteristics:	AA 1-600
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ST6GALNAC1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence:	<p>MRSCLWRCRH LSQGVQWSLL LAVLVFFLFA LPSFIKEPQT KPSRHQR TEN IKERSLQSLA KPKSQAPTRA RRTTIYAEPV PENNALNTQT QPKAHTTGDR GKEANQAPPE EQDKVPHTAQ RAAWKSPEKE KTMVNTLSPR GQDAGMASGR TEAQSWKSQD TKTTQGNNGGQ TRKLTASRTV SEKHQGKAAT TAKTLIPKSQ HRMLAPTGA V STRTRQKGVT TAVIPPKEKK PQATPPPAPF QSPTTQRNQR LKAANFKSEP RWD FEEKYSF EIGGLQTTCP DSVKIKASKS LWLQKLFLPN LTLFLDSRHF NQSEWDRLEH FAPPFGFME L NYSLVQKVVT RFPPVPQQQL LLASLPAGSL RCITCAVVGN GGILNNSHMG QEIDSHDYVF RLSGALIKGY EQDVGTRTSF YGFTAFSLTQ SLLILGNRGF KNPPLGKDVR YLHFLEGTRD YEWLEALLMN QTVMSKNLFW FRHRPQEA FR EALHMDRYLL LHPDFLRYMK NRFLRSKTL D GAHWRIYRPT TGALLLTAL QLCDQVSAYG FITEGHERFS DHYYDTSWKR LIFYINHDFK LEREVWKRLH DEGIIRLYQR PPGGTAKAKN</p> <p><b>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</b></p>
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**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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

#### 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.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.

## Product Details

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

Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

Target:	ST6GALNAC1
Alternative Name:	ST6GALNAC1 ( <a href="#">ST6GALNAC1 Products</a> )
Background:	<p>Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1 (EC 2.4.3.3) (GalNAc alpha-2,6-sialyltransferase I) (ST6GalNAc I) (ST6GalNAc-I) (ST6GalNAcI) (hST6GalNAc-I) (Sialyltransferase 7A) (SIAT7-A),FUNCTION: Protein sialyltransferase specifically expressed in goblet cells that plays a key role in intestinal host-commensal homeostasis (PubMed:35303419). Conjugates sialic acid with an alpha-2-6 linkage to N-acetylgalactosamine (GalNAc) glycan chains linked to serine or threonine in glycoproteins (PubMed:16319059, PubMed:35303419). Catalyzes the formation of the sialyl-Tn (S-Tn) antigen, an antigen found in intestinal goblet cells, as well as ulcerative colitis (UC) and various cancers (PubMed:16319059, PubMed:35303419). Protein sialylation in goblet cells is essential for mucus integrity and is required to protect the intestinal mucus against excessive bacterial proteolytic degradation (PubMed:35303419). {ECO:0000269 PubMed:16319059, ECO:0000269 PubMed:35303419}.</p>
Molecular Weight:	68.6 kDa
UniProt:	<a href="#">Q9NSC7</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:	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.

## Application Details

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. If you have a special request, please contact us.
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