Datasheet for ABIN3117194

ST6GALNAC6 Protein (AA 1-333) (Strep Tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	ST6GALNAC6
Protein Characteristics:	AA 1-333
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ST6GALNAC6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MACSRPPSQC EPTSLPPGPP AGRRHLPLSR RRREMSSNKE QRSAVFVILF ALITILILYS SNSANEVFHY GSLRGRSRRP VNLKKWSITD GYVPILGNKT LPSRCHQCVI VSSSSHLLGT KLGPEIERAE CTIRMNDAPT TGYSADVGNK TTYRVVAHSS VFRVLRRPQE FVNRTPETVF IFWGPPSKMQ KPQGSLVRVI QRAGLVFPNM EAYAVSPGRM RQFDDLFRGE TGKDREKSHS WLSTGWFTMV IAVELCDHVH VYGMVPPNYC SQRPRLQRMP YHYYEPKGPD ECVTYIQNEH SRKGNHHRFI TEKRVFSSWA QLYGITFSHP SWT

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 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.

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. 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.

Product Details

Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	ST6GALNAC6
Alternative Name:	ST6GALNAC6 (ST6GALNAC6 Products)
Background:	Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 6 (EC 2.4.99.-) (GalNAc alpha-2,6-sialyltransferase VI) (ST6GalNAc VI) (ST6GalNAcVI) (hST6GalNAc VI) (Sialyltransferase 7F) (SIAT7-F),FUNCTION: Transfers the sialyl group (N-acetyl-alpha-neuraminyl or NeuAc) from CMP-NeuAc onto glycoproteins and glycolipids, forming an alpha-2,6-linkage. Produces branched type disialyl structures by transfer of a sialyl group onto the GalNAc or GlcNAc residue inside backbone core chains having a terminal sialic acid with an alpha-2,3-linkage on Gal. ST6GalNAcVI prefers glycolipids to glycoproteins, predominantly catalyzing the biosynthesis of ganglioside GD1alpha from GM1b (PubMed:12668675, PubMed:17123352). Besides GMb1, MSGG and other glycolipids, it shows activity towards sialyl Lc4Cer generating disialyl Lc4Cer, which can lead to the synthesis of disialyl Lewis a (Le(a)), suggested to be a cancer-associated antigen (PubMed:12668675). Also has activity toward GD1a and GT1b, and can generate DSGG (disialylgalactosylgloboside) from MSGG (monosialylgalactosylgloboside) (By similarity). {ECO:0000250|UniProtKB:Q9JM95, ECO:0000269|PubMed:12668675, ECO:0000269|PubMed:17123352}.
Molecular Weight:	38.1 kDa
UniProt:	Q969X2

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

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. 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