Datasheet for ABIN3099550

FUT7 Protein (AA 1-342) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	FUT7
Protein Characteristics:	AA 1-342
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FUT7 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MNNAGHGPTR RLRGLGVLAG VALLAALWLL WLLGSAPRGT PAPQPTITIL VWHWPFTDQP PELPSDTCTR YGIARCHLSA NRSLLASADA VVFHHRELQT RRSHLPLAQR PRGQPWVWAS MESPSHTHGL SHLRGIFNWV LSYRRDSDIF VPYGRLEPHW GPSPPLPAKS RVAAWVVSNF QERQLRARLY RQLAPHLRVD VFGRANGRPL CASCLVPTVA QYRFYLSFEN SQHRDYITEK FWRNALVAGT VPVVLGPPRA TYEAFVPADA FVHVDDFGSA RELAAFLTGM NESRYQRFFA WRDRLRVRLF TDWRERFCAI CDRYPHLPRS QVYEDLEGWF QA **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:

Product Details

- 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 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 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:	FUT7

Target Details

Alternative Name:	FUT7 (FUT7 Products)
Background:	Alpha-(1,3)-fucosyltransferase 7 (EC 2.4.1.-) (Fucosyltransferase 7) (Fucosyltransferase VII) (Fuc-TVII) (FucT-VII) (Galactoside 3-L-fucosyltransferase) (Selectin ligand synthase),FUNCTION: Catalyzes the transfer of L-fucose, from a guanosine diphosphate-beta-L-fucose, to the N-acetyl glucosamine (GlcNAc) of a distal alpha2,3 sialylated lactosamine unit of a glycoprotein or a glycolipid-linked sialopolylactosamines chain through an alpha-1,3 glycosidic linkage and participates in the final fucosylation step in the biosynthesis of the sialyl Lewis X (sLe(x)), a carbohydrate involved in cell and matrix adhesion during leukocyte trafficking and fertilization (PubMed:8207002, PubMed:8752218, PubMed:8666674, PubMed:9299472, PubMed:9405391, PubMed:9473504, PubMed:9499379, PubMed:9461592, PubMed:15632313, PubMed:15926890, PubMed:18553500, PubMed:18402946, PubMed:11404359, PubMed:29593094). In vitro, also synthesizes sialyl-dimeric-Lex structures, from VIM-2 structures and both di-fucosylated and trifucosylated structures from mono-fucosylated precursors (PubMed:9499379). However does not catalyze alpha 1-3 fucosylation when an internal alpha 1-3 fucosylation is present in polylactosamine chain and the fucosylation rate of the internal GlcNAc residues is reduced once fucose has been added to the distal GlcNAc (PubMed:9473504, PubMed:9499379). Also catalyzes the transfer of a fucose from GDP-beta-fucose to the 6-sulfated a(2,3)sialylated substrate to produce 6-sulfo sLex mediating significant L-selectin-dependent cell adhesion (PubMed:10200296, PubMed:8752218). Through sialyl-Lewis(x) biosynthesis, can control SELE- and SELP-mediated cell adhesion with leukocytes and allows leukocytes tethering and rolling along the endothelial tissue thereby enabling the leukocytes to accumulate at a site of inflammation (PubMed:10386892, PubMed:29138114, PubMed:8666674, PubMed:9473504, PubMed:9834120). May enhance embryo implantation through sialyl Lewis X (sLeX)-mediated adhesion of embryo cells to endometrium (PubMed:18402946, PubMed:18553500). May affect insulin signaling by up-regulating the phosphorylation and expression of some signaling molecules involved in the insulin-signaling pathway through SLe(x) which is present on the glycans of the INSRR alpha subunit (PubMed:17229154). {ECO:0000269|PubMed:10200296, ECO:0000269|PubMed:10386892, ECO:0000269|PubMed:11404359, ECO:0000269|PubMed:15632313, ECO:0000269|PubMed:15926890, ECO:0000269|PubMed:17229154, ECO:0000269|PubMed:18402946, ECO:0000269|PubMed:18553500, ECO:0000269|PubMed:29138114, ECO:0000269|PubMed:8207002, ECO:0000269|PubMed:8666674, ECO:0000269|PubMed:8752218, ECO:0000269|PubMed:9299472, ECO:0000269|PubMed:9405391, ECO:0000269|PubMed:9461592, ECO:0000269|PubMed:9473504,

Target Details

	ECO:0000269|PubMed:9499379, ECO:0000269|PubMed:9834120}.
Molecular Weight:	39.2 kDa
UniProt:	Q11130

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 **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