

Datasheet for ABIN3116240 XYLT1 Protein (AA 1-959) (Strep Tag)

Go to Product pag

Overview

Quantity:	250 μg
Target:	XYLT1
Protein Characteristics:	AA 1-959
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This XYLT1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MVAAPCARRL ARRSHSALLA ALTVLLLQTL VVWNFSSLDS GAGERRGGAA VGGGEQPPPA
	PAPRRERRDL PAEPAAARGG GGGGGGGGG RGPQARARGG GPGEPRGQQP ASRGALPARA
	LDPHPSPLIT LETQDGYFSH RPKEKVRTDS NNENSVPKDF ENVDNSNFAP RTQKQKHQPE
	LAKKPPSRQK ELLKRKLEQQ EKGKGHTFPG KGPGEVLPPG DRAAANSSHG KDVSRPPHAR
	KTGGSSPETK YDQPPKCDIS GKEAISALSR AKSKHCRQEI GETYCRHKLG LLMPEKVTRF
	CPLEGKANKN VQWDEDSVEY MPANPVRIAF VLVVHGRASR QLQRMFKAIY HKDHFYYIHV
	DKRSNYLHRQ VLQVSRQYSN VRVTPWRMAT IWGGASLLST YLQSMRDLLE MTDWPWDFFI
	NLSAADYPIR TNDQLVAFLS RYRDMNFLKS HGRDNARFIR KQGLDRLFLE CDAHMWRLGD
	RRIPEGIAVD GGSDWFLLNR RFVEYVTFST DDLVTKMKQF YSYTLLPAES FFHTVLENSP
	HCDTMVDNNL RITNWNRKLG CKCQYKHIVD WCGCSPNDFK PQDFHRFQQT ARPTFFARKF
	EAVVNQEIIG QLDYYLYGNY PAGTPGLRSY WENVYDEPDG IHSLSDVTLT LYHSFARLGL

RRAETSLHTD GENSCRYYPM GHPASVHLYF LADRFQGFLI KHHATNLAVS KLETLETWVM
PKKVFKIASP PSDFGRLQFS EVGTDWDAKE RLFRNFGGLL GPMDEPVGMQ KWGKGPNVTV
TVIWVDPVNV IAATYDILIE STAEFTHYKP PLNLPLRPGV WTVKILHHWV PVAETKFLVA
PLTFSNRQPI KPEEALKLHN GPLRNAYMEQ SFQSLNPVLS LPINPAQVEQ ARRNAASTGT
ALEGWLDSLV GGMWTAMDIC ATGPTACPVM QTCSQTAWSS FSPDPKSELG AVKPDGRLR

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.

Product Details

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:	XYLT1
Alternative Name:	XYLT1 (XYLT1 Products)
Background:	Xylosyltransferase 1 (EC 2.4.2.26) (Peptide O-xylosyltransferase 1) (Xylosyltransferase I) (XT-I) (XyIT-I),FUNCTION: Catalyzes the first step in the biosynthesis of chondroitin sulfate and dermatan sulfate proteoglycans, such as DCN. Transfers D-xylose from UDP-D-xylose to specific serine residues of the core protein (PubMed:15461586, PubMed:17189265, PubMed:24581741, PubMed:23982343). Required for normal embryonic and postnatal skeletor development, especially of the long bones (PubMed:24581741, PubMed:23982343). Required for normal maturation of chondrocytes during bone development, and normal onset of ossification (By similarity). {ECO:0000250 UniProtKB:Q811B1, ECO:0000269 PubMed:15461586 ECO:0000269 PubMed:17189265, ECO:0000269 PubMed:23982343, ECO:0000269 PubMed:24581741}.
Molecular Weight:	107.6 kDa
UniProt:	Q86Y38
Pathways:	Glycosaminoglycan Metabolic Process
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

Application Details

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