

## Datasheet for ABIN3124930

# CSGALNACT1 Protein (AA 1-530) (Strep Tag)



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Quantity:	250 μg
Target:	CSGALNACT1
Protein Characteristics:	AA 1-530
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CSGALNACT1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

AliCE®
MVRRGLLGWI SRVVILLVLL CCAISVLYML ACTPKGDQEQ LGLPRANGPT GKDGYQAVLQ
EREEQHRNYV NSLKRQIAQL KDELQARSEQ FRSGQDQASD ATSLRSGWDR EPKAQADLLA
FLRGQVDKAE VHAGVKLATE YAAVPFDSFT LQKVYQLETG LTRHPEEKPV RKDKRDELVE
AIESALESLN SPVESSPHQR PYTAADFIEG IYRTERDKGT LYELTFKGDH KHEFQRLVLF
RPFGPIMKVK KEKLNLANTL INVIVPLARR VDKFRHFMQN FREMCIQQDG RVHLTVVYFG
KEEMNEVKGI LENTSKAANF RNFTFIQLNG EFSRGKGLDV GARFWKGSNV LLFFCDVDIY
FTSEFLNTCR LNTQPGKKVF YPVLFSQYNP GVIYGHHDAV PPLGQQLVIK KETGFWRDFG
FGMTCQYRSD FINIGGFDLD IKGWGGEDVH LYRKYLHSNL IVVRTPVRGL FHLWHEKHCM
DELTPEQYKM CMQSKAMNEA SHGQLGMLVF RHEIEAHLRK QKQKASSKKT
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:	CSGALNACT1	
Alternative Name:	Csgalnact1 (CSGALNACT1 Products)	
Background:	Chondroitin sulfate N-acetylgalactosaminyltransferase 1 (CsGalNAcT-1) (EC 2.4.1.174)	
	(Chondroitin beta-1,4-N-acetylgalactosaminyltransferase 1) (Beta4GalNAcT-1),FUNCTION:	
	Transfers 1,4-N-acetylgalactosamine (GalNAc) from UDP-GalNAc to the non-reducing end of	
	glucuronic acid (GlcUA). Required for addition of the first GalNAc to the core tetrasaccharide	
	linker and for elongation of chondroitin chains. Important role in chondroitin chain biosynthesis	
	in cartilage formation, and subsequent endochondral ossification (PubMed:17145758,	
	PubMed:21148564). Moreover, is involved in the metabolism of aggrecan (PubMed:21148564)	
	{ECO:0000269 PubMed:17145758, ECO:0000269 PubMed:21148564}.	
Molecular Weight:	60.9 kDa	
UniProt:	Q8BJQ9	
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	
	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	

# Handling

Buffer:	The buffer composition is at the discretion of the manufacturer.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months