

## Datasheet for ABIN3117690

# GAL3ST1 Protein (AA 1-423) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	GAL3ST1
Protein Characteristics:	AA 1-423
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GAL3ST1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MLPPQKKPWE SMAKGLVLGA LFTSFLLLVY SYAVPPLHAG LASTTPEAAA SCSPPALEPE
	AVIRANGSAG ECQPRRNIVF LKTHKTASST LLNILFRFGQ KHRLKFAFPN GRNDFDYPTF
	FARSLVQDYR PGACFNIICN HMRFHYDEVR GLVPTNAIFI TVLRDPARLF ESSFHYFGPV
	VPLTWKLSAG DKLTEFLQDP DRYYDPNGFN AHYLRNLLFF DLGYDNSLDP SSPQVQEHIL
	EVERRFHLVL LQEYFDESLV LLKDLLCWEL EDVLYFKLNA RRDSPVPRLS GELYGRATAW
	NMLDSHLYRH FNASFWRKVE AFGRERMARE VAALRHANER MRTICIDGGH AVDAAAIQDE
	AMQPWQPLGT KSILGYNLKK SIGQRHAQLC RRMLTPEIQY LMDLGANLWV TKLWKFIRDF LRW
	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:	GAL3ST1

# Target Details

Alternative Name:	GAL3ST1 (GAL3ST1 Products)
Background:	Galactosylceramide sulfotransferase (GalCer sulfotransferase) (EC 2.8.2.11) (3'-
	phosphoadenosine-5'-phosphosulfate:GalCer sulfotransferase) (3'-
	phosphoadenylylsulfate:galactosylceramide 3'-sulfotransferase) (Cerebroside
	sulfotransferase),FUNCTION: Catalyzes the transfer of a sulfate group to position 3 of non-
	reducing beta-galactosyl residues in glycerolipids and sphingolipids, therefore participates in
	the biosynthesis of sulfoglycolipids (PubMed:9030544, PubMed:8830034). Catalyzes the
	synthesis of galactosylceramide sulfate (sulfatide), a major lipid component of the myelin
	sheath and of monogalactosylalkylacylglycerol sulfate (seminolipid), present in spermatocytes
	(PubMed:8830034). Seems to prefer beta-glycosides at the non-reducing termini of sugar
	chains attached to a lipid moiety (PubMed:8830034). Also acts on lactosylceramide, galactosy
	1-alkyl-2-sn-glycerol and galactosyl diacylglycerol (in vitro) (PubMed:8830034).
	{ECO:0000269 PubMed:8830034, ECO:0000269 PubMed:9030544}.
Molecular Weight:	48.8 kDa
JniProt:	Q99999
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
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# Handling

Format:	Liquid
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