

# Datasheet for ABIN7556169 **ST3GAL1 Protein (AA 1-337) (His tag)**



#### Overview

Quantity:	1 mg
Target:	ST3GAL1
Protein Characteristics:	AA 1-337
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ST3GAL1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### **Product Details**

Purpose:	Custom-made recombinat St3gal1 Protein expressed in mammalien cells.
Sequence:	MRRKTLKYLT FFLLFIFLTS FVLNYSNTGV PSAWFPKQML LELSENFRRF IKSQPCTCRH
	CISQDKVSYW FDQRFNKTMQ PLLTVHNALM EEDTYRWWLR LQRERKPNNL SDTVKELFRL
	VPGNVDPMLN KRLVGCRRCA VVGNSGNLKD SSYGPEIDSH DFVLRMNKAP TVGFEADVGS
	RTTHHLVYPE SFRELGENVN MVLVPFKTTD LQWVISATTT GTITHTYVPV PPKIKVKQEK
	ILIYHPAFIK YVFDNWLQGH GRYPSTGILS IIFSIHICDE VDLYGFGADS KGNWHHYWEN
	NPSAGAFRKT GVHDGDFEYN ITTTLAAINK IRIFKGR Sequence without tag. The proposed
	Purification-Tag is based on experiences 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 to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

#### **Target Details**

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#### Alternative Name:

St3gal1 (ST3GAL1 Products)

Background:

CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,3-sialyltransferase 1 (Alpha 2,3-ST 1) (Beta-galactoside alpha-2,3-sialyltransferase 1) (EC 2.4.3.4) (Gal-NAc6S) (Gal-beta-1,3-GalNAc-alpha-2,3-sialyltransferase) (Monosialoganglioside sialyltransferase) (EC 2.4.3.2) (ST3Gal I) (ST3GalI) (ST3GalA.1) (ST3O) (Sialyltransferase 4A) (SIAT4-A),FUNCTION: A beta-galactoside alpha2-3 sialyltransferase involved in terminal sialylation of glycoproteins and glycolipids (PubMed:8375377, PubMed:9184827). Catalyzes the transfer of sialic acid (N-acetyl-neuraminic acid, Neu5Ac) from the nucleotide sugar donor CMP-Neu5Ac onto acceptor Galbeta-(1->3)-GalNAc-terminated glycoconjugates through an alpha2-3 linkage (PubMed:8144500, PubMed:8375377, PubMed:9184827, PubMed:10755614). Adds sialic acid to the core 1 O-glycan, Galbeta-(1->3)-GalNAc-O-Ser/Thr, which is a major structure of mucin-type O-glycans. As part of a homeostatic mechanism that regulates CD8-positive T cell numbers, sialylates core 1 O-glycans of T cell glycoproteins, SPN/CD43 and PTPRC/CD45. Prevents premature apoptosis of thymic CD8-positive T cells prior to peripheral emigration, whereas in the secondary lymphoid organs controls the survival of CD8-positive memory T cells generated

Target Details	
	following a successful immune response (PubMed:10755614). Transfers sialic acid to
	asialofetuin, presumably onto Galbeta-(1->3)-GalNAc-O-Ser (PubMed:8375377). Sialylates
	GM1a, GA1 and GD1b gangliosides to form GD1a, GM1b and GT1b, respectively
	(PubMed:8144500, PubMed:8375377, PubMed:9184827). {ECO:0000269 PubMed:10755614,
	ECO:0000269 PubMed:8144500, ECO:0000269 PubMed:8375377,
	ECO:0000269 PubMed:9184827}.
Molecular Weight:	39.1 kDa
UniProt:	P54751
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.

## Handling

Restrictions:

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

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