

# ST3GAL4 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22025a

## **Product Information**

**Application** WB, E **Primary Accession** Q11206 **Other Accession** P61130 Reactivity Human Host Rabbit Clonality polyclonal Isotype Rabbit IgG **Clone Names** RB55313 Calculated MW 38045

## **Additional Information**

Gene ID 6484

Other Names CMP-N-acetylneuraminate-beta-galactosamide-alpha-2, 3-sialyltransferase 4,

Alpha 2, 3-ST 4, Beta-galactoside alpha-2, 3-sialyltransferase 4, 2.4.99.-, Alpha

2, 3-sialyltransferase IV, Gal-NAc6S, Gal-beta-1, 4-GalNAc-alpha-2, 3-sialyltransferase, SAT-3, ST-4, ST3Gal IV, ST3GalIV, ST3GalA.2, STZ, Sialyltransferase 4C, SIAT4-C, ST3GAL4, CGS23, NANTA3, SIAT4C, STZ

**Target/Specificity** This ST3GAL4 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 26-57 amino acids from human

ST3GAL4.

**Dilution** WB~~1:1000-1:2000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** ST3GAL4 Antibody (N-Term) is for research use only and not for use in

diagnostic or therapeutic procedures.

## **Protein Information**

Name ST3GAL4

**Synonyms** CGS23, NANTA3, SIAT4C, STZ

#### **Function**

A beta-galactoside alpha2-3 sialyltransferase involved in terminal sialylation of glycoproteins and glycolipids (PubMed:8288606, PubMed:8611500). Catalyzes the transfer of sialic acid (N-acetyl- neuraminic acid; Neu5Ac) from the nucleotide sugar donor CMP-Neu5Ac onto acceptor Galbeta-(1->3)-GalNAc- and Galbeta-(1->4)-GlcNAc- terminated glycoconjugates through an alpha2-3 linkage (PubMed:8288606, PubMed:8611500). Plays a major role in hemostasis. Responsible for sialylation of plasma VWF/von Willebrand factor, preventing its recognition by asialoglycoprotein receptors (ASGPR) and subsequent clearance. Regulates ASGPR-mediated clearance of platelets (By similarity). Participates in the biosynthesis of the sialyl Lewis X epitopes, both on O- and N-glycans, which are recognized by SELE/E- selectin, SELP/P-selectin and SELL/L-selectin. Essential for selectin- mediated rolling and adhesion of leukocytes during extravasation (PubMed: 25498912). Contributes to adhesion and transendothelial migration of neutrophils likely through terminal sialylation of CXCR2 (By similarity). In glycosphingolipid biosynthesis, sialylates GM1 and GA1 gangliosides to form GD1a and GM1b, respectively (PubMed:8288606). Metabolizes brain c-series ganglioside GT1c forming GQ1c (By similarity). Synthesizes ganglioside LM1 (IV3Neu5Ac-nLc4Cer), a major structural component of peripheral nerve myelin (PubMed:8611500).

#### **Cellular Location**

Golgi apparatus, Golgi stack membrane; Single- pass type II membrane protein. Secreted. Note=Membrane-bound form in trans cisternae of Golgi. Secreted into the body fluid

**Tissue Location** 

Highly expressed in adult placenta, heart and kidney.

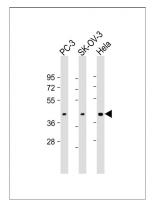
# **Background**

It may catalyze the formation of the NeuAc-alpha-2,3- Gal-beta-1,3-GalNAc- or NeuAc-alpha-2,3-Gal-beta-1,3-GlcNAc- sequences found in terminal carbohydrate groups of glycoproteins and glycolipids. It may be involved in the biosynthesis of the sialyl Lewis X determinant. Also acts on the corresponding 1,3- galactosyl derivative.

## References

Kitagawa H.,et al.J. Biol. Chem. 271:931-938(1996). Kitagawa H.,et al.J. Biol. Chem. 269:1394-1401(1994). Sasaki K.,et al.J. Biol. Chem. 268:22782-22787(1993). Grahn A.,et al.Glycoconj. J. 18:759-767(2001). Ota T.,et al.Nat. Genet. 36:40-45(2004).

# **Images**



All lanes: Anti-ST3GAL4 Antibody (N-Term) at 1:1000-1:2000 dilution Lane 1: PC-3 whole cell lysate Lane 2: SK-OV-3 whole cell lysate Lane 3: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.