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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, PubMed:37632720). 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.

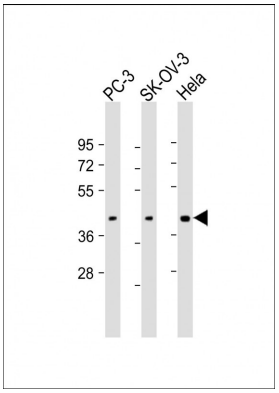
Background

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'.