

ST3GAL4 Blocking Peptide (N-Term)

Synthetic peptide

Catalog # BP22025a

Specification**ST3GAL4 Blocking Peptide (N-Term) - Product Information**Primary Accession [Q11206](#)Other Accession [P61130](#)**ST3GAL4 Blocking Peptide (N-Term) - Additional Information****Gene ID** 6484**Other Names**

CMP-N-acetylneuraminate-beta-galactosaminide-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

The synthetic peptide sequence is selected from aa 46-57 of HUMAN ST3GAL4

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ST3GAL4 Blocking Peptide (N-Term) - Protein Information**ST3GAL4 Blocking Peptide (N-Term) - 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.

ST3GAL4 Blocking Peptide (N-Term) - 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).

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-acetylneuraminic 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.

**ST3GAL4 Blocking Peptide (N-Term) -
Protocols**

Provided below are standard protocols that you
may find useful for product applications.

- [Blocking Peptides](#)