

ST3GAL2 Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP21060a**Specification**

ST3GAL2 Blocking Peptide (N-term) - Product InformationPrimary Accession [Q16842](#)**ST3GAL2 Blocking Peptide (N-term) - Additional Information**

Gene ID 6483

Other Names

CMP-N-acetylneuraminate-beta-galactosamide-alpha-2, 3-sialyltransferase 2, Alpha 2, 3-ST 2, Beta-galactoside alpha-2, 3-sialyltransferase 2, Gal-NAc6S, Gal-beta-1, 3-GalNAc-alpha-2, 3-sialyltransferase, ST3Gal II, ST3GalIII, ST3GalA2, Sialyltransferase 4B, SIAT4-B, ST3GAL2, SIAT4B

Target/Specificity

The synthetic peptide sequence is selected from aa 55-69 of HUMAN ST3GAL2

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.

ST3GAL2 Blocking Peptide (N-term) - Protein InformationName ST3GAL2 ([HGNC:10863](#))

Synonyms SIAT4B

Function

A beta-galactoside alpha2-3 sialyltransferase primarily involved in terminal sialylation of ganglio and globo series glycolipids (PubMed:8920913, PubMed:9266697). 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:8920913, PubMed:9266697, PubMed:25916169). Sialylates GM1/GM1a, GA1/asialo-GM1 and GD1b gangliosides to form GD1a, GM1b and GT1b, respectively (PubMed:8920913,

PubMed: [9266697](http://www.uniprot.org/citations/9266697)). Together with ST3GAL3, primarily responsible for biosynthesis of brain GD1a and GT1b that function as ligands for myelin-associated glycoprotein MAG on axons, regulating MAG expression and axonal myelin stability and regeneration (By similarity). Via GT1b regulates TLR2 signaling in spinal cord microglia in response to nerve injury (By similarity). Responsible for the sialylation of the pluripotent stem cell- and cancer stem cell- associated antigen SSEA3, forming SSEA4 (PubMed: [12716912](http://www.uniprot.org/citations/12716912)). Sialylates with low efficiency asialofetuin, presumably onto O-glycosidically linked Galbeta-(1->3)-GalNAc-O-Ser (PubMed: [9266697](http://www.uniprot.org/citations/9266697), PubMed: [25916169](http://www.uniprot.org/citations/25916169)).

Cellular Location

Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. Secreted. Note=Membrane-bound form distributed along the Golgi cisternae, mainly in proximal compartments (PubMed:25916169). Secreted into the body fluid. {ECO:0000250, ECO:0000269|PubMed:25916169}

Tissue Location

Highly expressed in skeletal muscle and heart and to a much lesser extent in brain, placenta, liver and pancreas Scarcely detectable in lung and kidney.

ST3GAL2 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

ST3GAL2 Blocking Peptide (N-term) - Images

ST3GAL2 Blocking Peptide (N-term) - Background

It may be responsible for the synthesis of the sequence NeuAc-alpha-2,3-Gal-beta-1,3-GalNAc- found in terminal carbohydrate groups of certain glycoproteins, oligosaccharides and glycolipids. SIAT4A and SIAT4B sialylate the same acceptor substrates but exhibit different Km values.

ST3GAL2 Blocking Peptide (N-term) - References

Kim Y.-J., et al. Biochem. Biophys. Res. Commun. 228:324-327(1996).
Giordanengo V., et al. Eur. J. Biochem. 247:558-566(1997).