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ST6GALNAC1 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP12398a

Specification

ST6GALNAC1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q9NSC7

ST6GALNAC1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 55808

Other Names
Alpha-N-acetylgalactosaminide alpha-2, 6-sialyltransferase 1, GalNAc alpha-2, 6-sialyltransferase I, ST6GalNAc I, ST6GalNAcI, Sialyltransferase 7A, SIAT7-A, ST6GALNAC1, SIAT7A

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.

ST6GALNAC1 Antibody (N-term) Blocking peptide - Protein Information

Name ST6GALNAC1 (HGNC:23614)

Synonyms SIAT7A

Function
Protein sialyltransferase specifically expressed in goblet cells that plays a key role in intestinal host-commensal homeostasis (PubMed:35303419). Conjugates sialic acid with an alpha-2-6 linkage to N-acetylgalactosamine (GalNAc) glycan chains linked to serine or threonine in glycoproteins (PubMed:16319059, PubMed:35303419). Catalyzes the formation of the sialyl-Tn (S-Tn) antigen, an antigen found in intestinal goblet cells, as well as ulcerative colitis (UC) and various cancers (PubMed:16319059, PubMed:35303419). Protein sialylation in globlet cells is essential for mucus integrity and is required to protect the intestinal mucus against excessive bacterial proteolytic degradation (PubMed:35303419).

Cellular Location

Golgi apparatus membrane; Single-pass type II membrane protein

Tissue Location
Expression is restricted to the gastrointestinal tract (PubMed:16319059). Highly expressed in goblet cells (PubMed:35303419). Also expressed in various tumor cells (PubMed:16319059).

ST6GALNAC1 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

ST6GALNAC1 Antibody (N-term) Blocking peptide - Images

ST6GALNAC1 Antibody (N-term) Blocking peptide - Background

Glycosylation of proteins affects cell-cell interaction,interactions with the matrix, and the functions of intracellularmolecules. ST6GALNAC1 transfers a sialic acid, N-acetylneuraminicacid (NeuAc), in an alpha-2,6 linkage to O-linked GalNAc residues.The cancer-associated sialyl-Tn (sTn) antigen is formed byST6GALNAC1-catalyzed sialylation of GalNAc residues on mucins(Ikehara et al., 1999 [PubMed 10536037]; Sewell et al., 2006[PubMed 16319059]).

ST6GALNAC1 Antibody (N-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Hassinen, A., et al. J. Biol. Chem. 285(23):17771-17777(2010)Patani, N., et al. Cancer Genomics Proteomics 5(6):333-340(2008)Olsen, J.V., et al. Cell 127(3):635-648(2006)Olsen, J.V., et al. Cell 127(3):635-648(2006)