

ST3gal6 Antibody

Catalog # ASC10907

Product Information

Application	WB, ICC, E
Primary Accession	Q9Y274
Other Accession	NP_006091 , 5174697
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	38214
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ST3gal6 antibody can be used for detection of ST3gal6 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunocytochemistry starting at 5 μ g/mL.

Additional Information

Gene ID	10402
Other Names	Type 2 lactosamine alpha-2, 3-sialyltransferase, 2.4.99.-, CMP-NeuAc:beta-galactoside alpha-2, 3-sialyltransferase VI, ST3Gal VI, ST3GalVI, Sialyltransferase 10, ST3GAL6, SIAT10
Target/Specificity	ST3GAL6;
Reconstitution & Storage	ST3gal6 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	ST3gal6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ST3GAL6
Synonyms	SIAT10
Function	Transfers the sialyl residue from CMP-N-acetyl-beta- neuraminate to the terminal galactose residue on sugar chains of glycoproteins and glycolipids (PubMed: 10206952 , PubMed: 26692484). Its alpha-2,3-sialyltransferase activity is specific toward type II glycan chains (Galbeta1-4GlcNAc) on glycoproteins and glycolipids such as neolactosides nLc4Cer and nLc6Cer, whose sialyl-products serve as precursors for the Lewis X antigen

(PubMed:[10206952](#), PubMed:[26692484](#)). Critically involved in the synthesis of functional selectin ligands needed for neutrophil recruitment during inflammation and lymphocyte homing to the lymph nodes (By similarity).

Cellular Location	Golgi apparatus membrane; Single-pass type II membrane protein
Tissue Location	Ubiquitous.

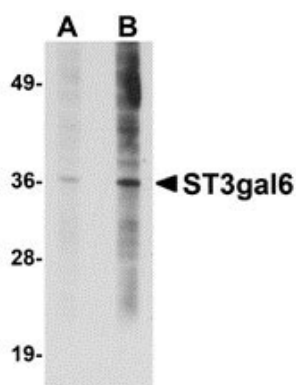
Background

ST3gal6 Antibody: Sialyltransferases catalyze the transfer of sialic acid from cytidine 5-prime monophospho-N-acetylneuraminic acid (CMP-NeuAc) to terminal positions of glycoprotein and glycolipid carbohydrate groups. Terminal NeuAc residues are key determinants of carbohydrate structures, such as the sialyl-Lewis X determinants, and are widely distributed in many cell types. However, cancer cells often express more heavily sialylated glycans on their cell surface and this feature sometimes correlates with invasiveness. In contrast, expression of ST3gal6, a member of the sialyltransferase family that sialylates type II lactosamine structures on glycoproteins and glycolipids, was found to be significantly decreased by hypermethylation of the gene in gastrointestinal cancer. At least three isoforms of ST3gal6 are known to exist.

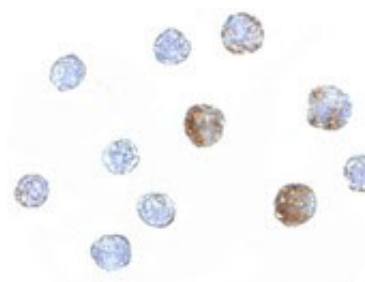
References

Dall'Olio F and Chiricolo M. Sialyltransferases in cancer. *Glycoconj. J.*2001; 18:841-50.
Okajima T, Fukumoto S, Miyazaki H, et al. Molecular cloning of a novel alpha2,3-sialyltransferase (ST3Gal VI) that sialylates type II lactosamine structures on glycoproteins and glycolipids. *J. Biol. Chem.*1999; 274:11479-86.
Kawamura YI, Toyota M, Kawashima R, et al. DNA hypermethylation contributes to incomplete synthesis of carbohydrate determinants in gastrointestinal cancer. *Gastroenterology*2008; 135:142-51.

Images



Western blot analysis of ST3gal6 in HeLa cell lysate with ST3gal6 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of ST3gal6 in HeLa cells with ST3gal6 antibody at 5 µg/mL.