

CHST5 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP18949b

Specification

CHST5 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession <u>Q9GZS9</u>

CHST5 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 23563

Other Names

Carbohydrate sulfotransferase 5, 282-, Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 4-alpha, GST4-alpha, Intestinal N-acetylglucosamine-6-O-sulfotransferase, I-GlcNAc6ST, Intestinal GlcNAc-6-sulfotransferase, hIGn6ST, N-acetylglucosamine 6-O-sulfotransferase 3, GlcNAc6ST-3, Gn6st-3, CHST5

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.

CHST5 Antibody (C-term) Blocking Peptide - Protein Information

Name CHST5

Function

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of non-reducing N-acetylglucosamine (GlcNAc) residues and O-linked sugars of mucin-type acceptors. Acts on the non-reducing terminal GlcNAc of short carbohydrate substrates. However, it does not transfer sulfate to longer carbohydrate substrates that have poly-N- acetyllactosamine structures. Has no activity toward keratan. Not involved in generating HEV-expressed ligands for SELL. Its substrate specificity may be influenced by its subcellular location.

Cellular Location

Golgi apparatus membrane; Single-pass type II membrane protein. Note=Golgi membrane, early secretory pathway

Tissue Location

Predominantly expressed in small and large intestines and colon. Weakly expressed in lymphocytes. Not expressed in other tissues. Down-regulated in colonic adenocarcinomas



CHST5 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

CHST5 Antibody (C-term) Blocking Peptide - Images

CHST5 Antibody (C-term) Blocking Peptide - Background

The carbohydrates of glycoconjugates are highly diversestructures with variation in monosaccharide composition, glycosidiclinkage positions, and branching of chains. Further diversity isadded by the covalent addition of sulfate moieties to particularlydroxyl groups and amino groups of saccharides. The sulfatemodifications of glycoproteins can be extensive in amount andfrequently occur at high density. They can have a profound effecton the physiochemical properties of the glycoconjugates, at leastin part through the addition of negative charge. Carbohydratesulfation plays a critical role in many biologic processes. CHST5belongs to the GST family of sulfotransferases, which also includesCHST1 (MIM 603797), CHST2 (MIM 603798), CHST3 (MIM 603799), andLSST. These enzymes are 6-O-sulfotransferases, which add sulfate toC6 of galactose (Gal), N-acetylgalactosamine (GalNAc), orN-acetylglucosamine (GlcNAc) (Lee et al., 1999 [PubMed10491328]).

CHST5 Antibody (C-term) Blocking Peptide - References

Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)Dastani, Z., et al. Eur. J. Hum. Genet. 18(3):342-347(2010)Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)Kitayama, K., et al. J. Biol. Chem. 282(41):30085-30096(2007)Lamesch, P., et al. Genomics 89(3):307-315(2007)