

CHST5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18949b

Specification

CHST5 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q9GZS9

Other Accession Q9GZX3, NP_078809.2

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
A6161
275-302

CHST5 Antibody (C-term) - 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

Target/Specificity

This CHST5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 275-302 amino acids from the C-terminal region of human CHST5.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CHST5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CHST5 Antibody (C-term) - 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

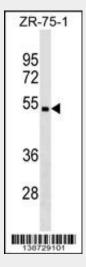
Predominantly expressed in small and large intestines and colon. Weakly expressed in lymphocytes. Not expressed in other tissues. Down-regulated in colonic adenocarcinomas

CHST5 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

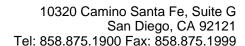
CHST5 Antibody (C-term) - Images



CHST5 Antibody (C-term) (Cat. #AP18949b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the CHST5 antibody detected the CHST5 protein (arrow).

CHST5 Antibody (C-term) - Background

The carbohydrates of glycoconjugates are highly diverse





structures with variation in monosaccharide composition, glycosidic linkage positions, and branching of chains. Further diversity is added by the covalent addition of sulfate moieties to particular hydroxyl groups and amino groups of saccharides. The sulfate modifications of glycoproteins can be extensive in amount and frequently occur at high density. They can have a profound effect on the physiochemical properties of the glycoconjugates, at least in part through the addition of negative charge. Carbohydrate sulfation plays a critical role in many biologic processes. CHST5 belongs to the GST family of sulfotransferases, which also includes CHST1 (MIM 603797), CHST2 (MIM 603798), CHST3 (MIM 603799), and LSST. These enzymes are 6-O-sulfotransferases, which add sulfate to C6 of galactose (Gal), N-acetylgalactosamine (GalNAc), or N-acetylglucosamine (GlcNAc) (Lee et al., 1999 [PubMed 10491328]).

CHST5 Antibody (C-term) - 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)