

CHST4 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21310b**Specification**

CHST4 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q8NCG5
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	45134

CHST4 Antibody (C-term) - Additional Information**Gene ID** 10164**Other Names**

Carbohydrate sulfotransferase 4, 282-, Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 3, GST-3, High endothelial cells N-acetylglucosamine 6-O-sulfotransferase, HEC-GlcNAc6ST, L-selectin ligand sulfotransferase, LSST, N-acetylglucosamine 6-O-sulfotransferase 2, GlcNAc6ST-2, Gn6st-2, CHST4

Target/Specificity

This CHST4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 357-390 amino acids from the C-terminal region of human CHST4.

Dilution

WB~~1:2000

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

CHST4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CHST4 Antibody (C-term) - Protein Information**Name** CHST4**Function** Sulfotransferase involved in SELL/L-selectin ligand biosynthesis pathway. Catalyzes the

transfer of the sulfate group from 3'-phospho-5'-adenylyl sulfate (PAPS) onto the hydroxyl group at C-6 position of the non-reducing N-acetylglucosamine (GlcNAc) residue within O-linked mucin-type glycans. Contributes to generate sialyl 6- sulfo Lewis X determinant (also known as MECA-79 epitope) for SELL recognition, a prerequisite for continuous lymphocyte homing into peripheral lymph nodes and antigen immune surveillance (PubMed:[11439191](#), PubMed:[12107080](#), PubMed:[10330415](#), PubMed:[11726653](#)). Transfers the sulfate group primarily on core 2 GlcNAc β 1-6(Gal β 1- 3)GalNAc α Ser/Thr and extended core 1 GlcNAc β 1-3Gal β 1-3GalNAc α Ser/Thr based O-linked glycans on CD34 and GLYCAM1 peripheral node addressins (PNAds) expressed on the luminal side of high endothelial venules (HEVs) (PubMed:[11439191](#)). The recognition of PNAds by SELL initiates a multistep process comprising tethering and rolling of blood lymphocytes on HEVs against the blood flow, followed by chemokine signaling, integrin-mediated lymphocyte adhesion onto endothelial cells and lymphocyte transendothelial migration. Modulates rolling velocity and differential T and B lymphocyte recruitment into peripheral lymph nodes, with a major role in B lymphocyte homing. Might be redundant in sulfation of MADCAM1 and lymphocyte trafficking to mesenteric lymph nodes (By similarity). Can also sulfonate core 3 GlcNAc β 1-3GalNAc-R based glycans as well as GlcNAc β 1-3Gal β 1-Glc, GlcNAc β 1-6ManOMe and GlcNAc β 1-2Man oligosaccharides, which might be ectopically expressed during tumorigenesis (PubMed:[12107080](#), PubMed:[11439191](#), PubMed:[11726653](#)).

Cellular Location

Golgi apparatus membrane; Single-pass type II membrane protein

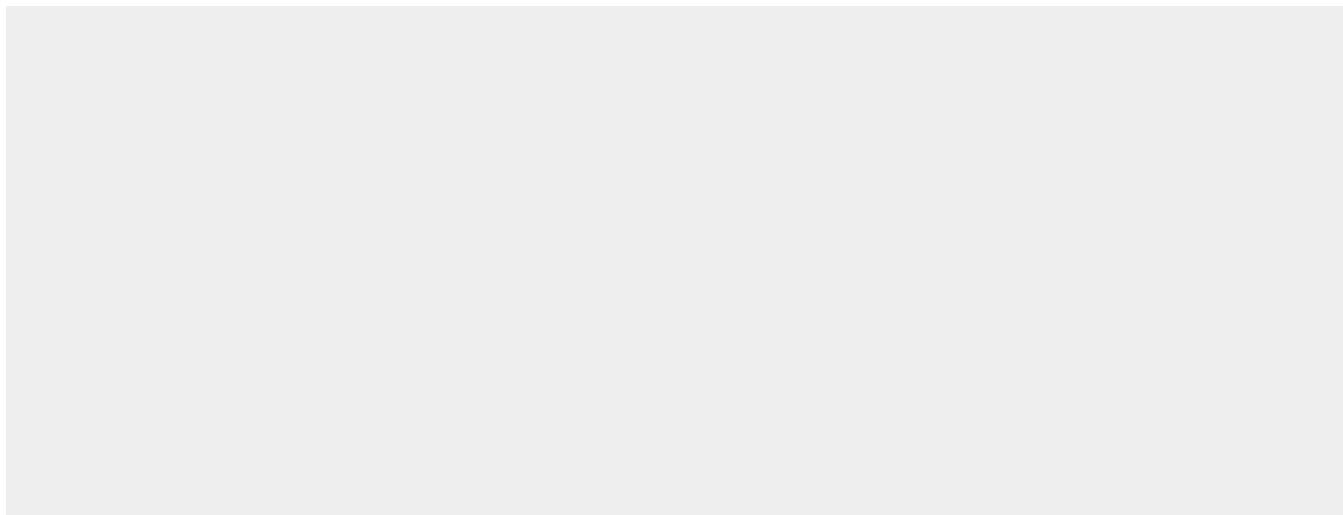
Tissue Location

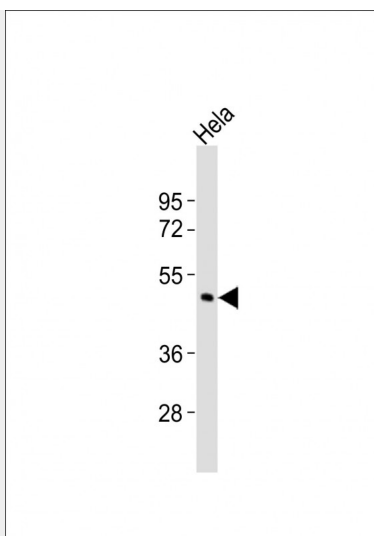
Specifically expressed in HEV. Weakly expressed in spleen. Not expressed in other tissues. Expressed in colonic mucinous adenocarcinoma.

CHST4 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CHST4 Antibody (C-term) - Images



Anti-CHST4 Antibody (C-term) at 1:2000 dilution + HeLa whole cell lysates. Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa. Blocking/Dilution buffer: 5% NFDM/TBST.

CHST4 Antibody (C-term) - Background

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 within mucin-associated glycans that ultimately serve as SELL ligands. SELL ligands are present in high endothelial cells (HEVs) and play a central role in lymphocyte homing at sites of inflammation. Participates in biosynthesis of the SELL ligand sialyl 6-sulfo Lewis X on receptors SPN/CD43, GLYCAM1 and MADCAM1. Also involved in biosynthesis of SELL ligand recognized by MECA-79 antibody. Plays a central role in lymphocyte trafficking during chronic inflammation. Has a catalytic preference for core 2- branched mucin-type O-glycans. Can use GlcNAcβ1-6[Galβ1-3]GalNAc-pNP (core 2), GlcNAcβ1-6ManOME and GlcNAcβ1-2Man oligosaccharide structures as acceptors. Has also activity toward core 3 of GlcNAcβ1-3GalNAc-pNP. Its substrate specificity may be influenced by its subcellular location.

CHST4 Antibody (C-term) - References

Bistrup A., et al. *J. Cell Biol.* 145:899-910(1999).
Yeh J.-C., et al. *Cell* 105:957-969(2001).
Hemmerich S., et al. *Glycobiology* 11:75-87(2001).
Ota T., et al. *Nat. Genet.* 36:40-45(2004).
Li X., et al. *J. Leukoc. Biol.* 69:565-574(2001).