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CHST4 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI10880

Product Information

Application	WB
Primary Accession	Q8NCG5
Other Accession	NM_005769, NP_005760
Reactivity	Human, Rabbit, Dog, Horse, Bovine
Predicted	Human, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45134

Additional Information

Gene ID	10164
Alias Symbol	GST3, LSST, GlcNAc6ST2, HECGLCNAC6ST
Other Names	Carbohydrate sulfotransferase 4, 2.8.2.-, 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
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CHST4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CHST4 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

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:10330415, PubMed:11439191, PubMed:11726653, PubMed:12107080). Transfers the sulfate group primarily on core 2 GlcNAcbeta1-6(Galbeta1- 3)GalNAcalphaSer/Thr and extended core 1 GlcNAcbeta1-3Galbeta1- 3GalNAcalphaSer/Thr based O-linked glycans on CD34 and GLYCAM1 peripheral node addressins (PNAds) expressed on the lumenal 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 GlcNAcbeta1-3GalNAc-R based glycans as well as GlcNAcbeta1-3Galbeta1- Glc, GlcNAcbeta1-6ManOMe and GlcNAcbeta1-2Man oligosaccharides, which might be ectopically expressed during tumorigenesis (PubMed:11439191, PubMed:11726653, PubMed:12107080).

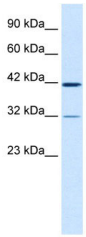
Cellular Location Golgi apparatus membrane; Single-pass type II membrane protein

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

References

Akama,T.O., et al., (2002) J. Biol. Chem. 277 (45), 42505-42513Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

Images



WB Suggested Anti-CHST4 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: HepG2 cell lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.