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CHST2 Polyclonal Antibody

Catalog # AP69103

Product Information

Application	WB, E
Primary Accession	Q9Y4C5
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57857

Additional Information

Gene ID	9435
Other Names	CHST2; GN6ST; Carbohydrate sulfotransferase 2; Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 2; GST-2; N-acetylglucosamine 6-O-sulfotransferase 1; GlcNAc6ST-1; Gn6ST-1
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

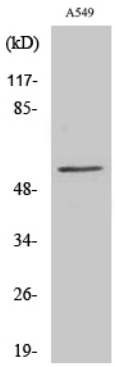
Name	CHST2
Synonyms	GN6ST
Function	Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of non-reducing N-acetylglucosamine (GlcNAc) residues within keratan-like structures on N- and O-linked glycans and within O-linked mucin-type glycans (PubMed:11042394, PubMed:11726653, PubMed:35939855, PubMed:38034954, PubMed:9722682). Selectively transfers the sulfate group onto the terminal GlcNAc of alpha1,3-Man or alpha1,6-Man antenna of complex-type N-glycans depending on glycan composition. Only sulfates terminal GlcNAc of alpha1,3-Man antenna of G0 complex-type N- glycans. Can sulfate keratan-type N-acetyllactosamine (LacNAc) repeats generating epitopes for self versus non-self immune recognition by C- type lectins (PubMed:35939855, PubMed:38034954). Transfers the sulfate group primarily on core 2 GlcNAcbeta1-6(Galbeta1-3)GalNAcalpha-Ser/Thr and with lower efficiency on extended core 1 GlcNAcbeta1-3Galbeta1- 3GalNAcalpha-Ser/Thr

	based O-linked glycans on peripheral node addressins (PNAds) expressed on the lumenal side of high endothelial venules (HEVs). Shares substrate specificity with CHST4 and both contribute 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 (By similarity) (PubMed:9722682). Has no activity toward alpha-linked GlcNAc moiety exposed at the non-reducing ends or to internally located GlcNAc residues (PubMed:11042394).
Cellular Location	Golgi apparatus, trans-Golgi network membrane; Single-pass type II membrane protein
Tissue Location	Widely expressed. Highly expressed in bone marrow, peripheral blood leukocytes, spleen, brain, spinal cord, ovary and placenta. Expressed by high endothelial cells (HEVs) and leukocytes

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 keratan-like structures on N-linked glycans and within mucin-associated glycans that can 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 and in lymphocyte homing to Peyer patches. Has no activity toward O-linked sugars. Its substrate specificity may be influenced by its subcellular location. Sulfates GlcNAc residues at terminal, non-reducing ends of oligosaccharide chains.

Images



Western Blot analysis of various cells using CHST2 Polyclonal Antibody

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