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CHST2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19294b

Product Information

Application	WB, E
Primary Accession	Q9Y4C5
Other Accession	Q80WV3, NP_004258.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39794
Calculated MW	57857
Antigen Region	493-522

Additional Information

Gene ID	9435
Other Names	Carbohydrate sulfotransferase 2, 282-, Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 2, GST-2, N-acetylglucosamine 6-O-sulfotransferase 1, GlcNAc6ST-1, Gn6ST-1, CHST2, GN6ST
Target/Specificity	This CHST2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 493-522 amino acids from the C-terminal region of human CHST2.
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	CHST2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

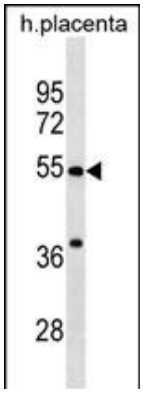
N-acetylglucosamine-6-O-sulfotransferases, such as CHST2, catalyze the transfer of sulfate from 3-prime-phosphoadenosine 5-prime-phosphosulfate (PAPS) to position 6 of a nonreducing N-acetylglucosamine (GlcNAc) residue (Uchimura et al., 1998 [PubMed 9722682]).

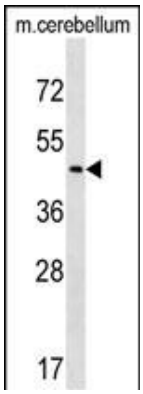
References

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Desko, M.M., et al. Glycobiology 19(10):1068-1077(2009)
Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)
Kanoh, A., et al. Glycoconj. J. 23 (5-6), 453-460 (2006) :

Images

CHST2 Antibody (C-term)(Cat. #AP19294b) western blot analysis in human placenta tissue lysates (35ug/lane).This demonstrates the CHST2 antibody detected the CHST2 protein (arrow).





CHST2 Antibody (C-term) (Cat. #AP19294b) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the CHST2 antibody detected the CHST2 protein (arrow).

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