

CHST2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10704c

Specification

CHST2 Antibody (Center) - Product Information

Application	FC, WB,E
Primary Accession	O9Y4C5
Other Accession	O80WV3 , NP_004258.2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57857
Antigen Region	309-335

CHST2 Antibody (Center) - 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 309-335 amino acids from the Central region of human CHST2.

Dilution

FC~~1:10~50

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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CHST2 Antibody (Center) - 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-acetylglucosamine (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 luminal 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

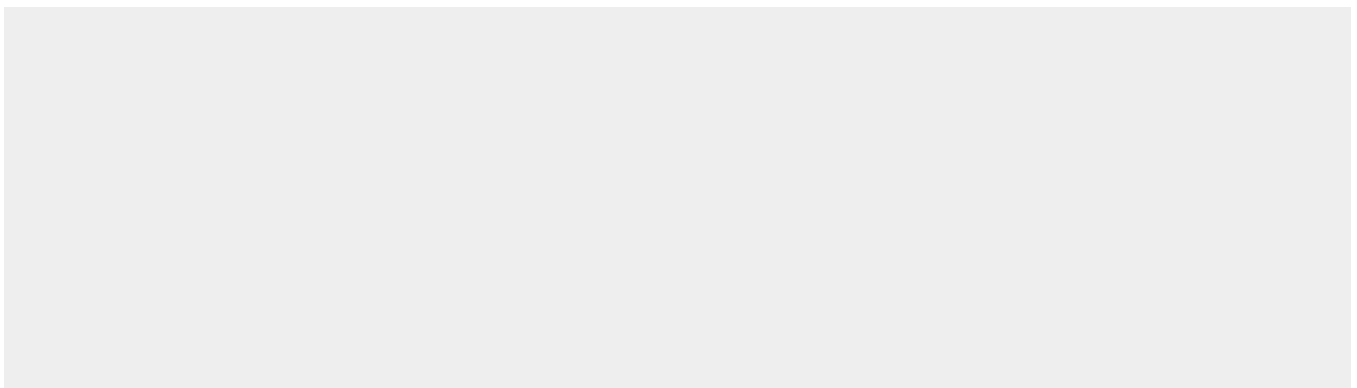
Widely expressed. Highly expressed in bone marrow, peripheral blood leukocytes, spleen, brain, spinal cord, ovary and placenta. Expressed by high endothelial cells (HEVs) and leukocytes

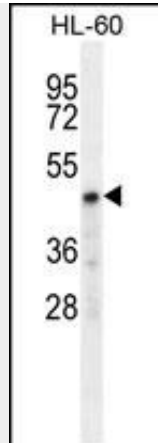
CHST2 Antibody (Center) - Protocols

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

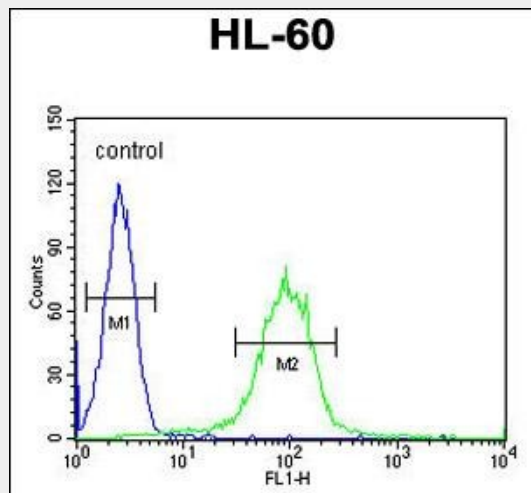
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CHST2 Antibody (Center) - Images





CHST2 Antibody (Center) (Cat. #AP10704c) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the CHST2 antibody detected the CHST2 protein (arrow).



CHST2 Antibody (Center) (Cat. #AP10704c) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CHST2 Antibody (Center) - 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]).

CHST2 Antibody (Center) - References

- Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)
- Ross, C.J., et al. Nat. Genet. 41(12):1345-1349(2009)
- 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) :