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CHST1 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12583

Product Information

Application	WB, IHC
Primary Accession	O43916
Other Accession	NM_003654, NP_003645
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46715

Additional Information

Gene ID	8534
Alias Symbol	C6ST, KS6ST, KSGal6ST, KSST, GST-1
Other Names	Carbohydrate sulfotransferase 1, 2.8.2.21, Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 1, GST-1, Keratan sulfate Gal-6 sulfotransferase, KS6ST, KSGal6ST, KSST, CHST1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-CHST1 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	CHST1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

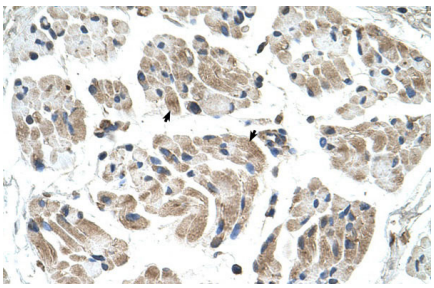
Name	CHST1 (HGNC:1969)
Function	Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of internal galactose (Gal) residues of keratan. Cooperates with B4GALT4 and B3GNT7 glycosyltransferases and CHST6 sulfotransferase to construct and elongate disulfated disaccharide unit [->3(6- sulfoGalbeta)1->4(6-sulfoGlcNAcbeta)1->] within keratan sulfate polymer (PubMed:10642612, PubMed:17690104, PubMed:9405439). Has a preference for sulfating keratan sulfate, but it also transfers sulfate to the unsulfated polymer (PubMed:9405439). Involved in biosynthesis of phosphacan, a major keratan sulfate proteoglycan in the

	developing brain (By similarity). Involved in biosynthesis of 6-sulfoGalbeta-containing O-linked glycans in high endothelial venules of lymph nodes. May act in a synergistic manner with CHST4 to generate sialyl 6',6- disulfo Lewis X motif, a recognition determinant for immune cell receptors implicated in leukocyte trafficking (PubMed:10330415). Catalyzes sulfation of N-acetyllactosamine (LacNAc) oligosaccharides with highest efficiency for sialylated LacNAc structures (PubMed:10642612).
Cellular Location	Golgi apparatus membrane; Single- pass type II membrane protein
Tissue Location	Widely expressed at low level. Expressed in brain and skeletal muscle. Expressed by high endothelial cells (HEVs) and leukocytes.

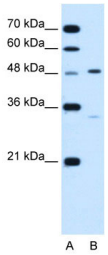
References

Yamada,T.,Biochem.J.384(PT3),567-575(2004)ReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.

Images



Human Muscle



WB Suggested Anti-CHST1 Antibody Titration: 1.25 µg/ml
Positive Control: Jurkat cell lysate