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CHST1 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI12584

Specification

CHST1 antibody - middle region - Product Information

Application	**WB**
Primary Accession	O43916
Other Accession	NM_003654, NP_003645
Reactivity	**Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Zebrafish, Chicken, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**47kDa KDa**

CHST1 antibody - middle region - 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 50 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 - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

CHST1 antibody - middle region - 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:<a href="http://www.uniprot.org/citations/10642612"

target="_blank">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

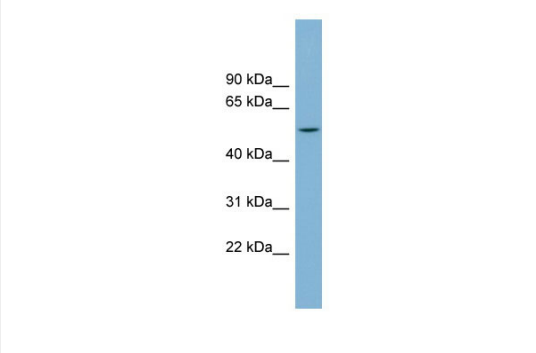
Tissue Location
Widely expressed at low level. Expressed in brain and skeletal muscle. Expressed by high endothelial cells (HEVs) and leukocytes.

CHST1 antibody - middle region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CHST1 antibody - middle region - Images



WB Suggested Anti-CHST1 Antibody Titration: 0.2-1 µg/ml
Positive Control: Human kidney

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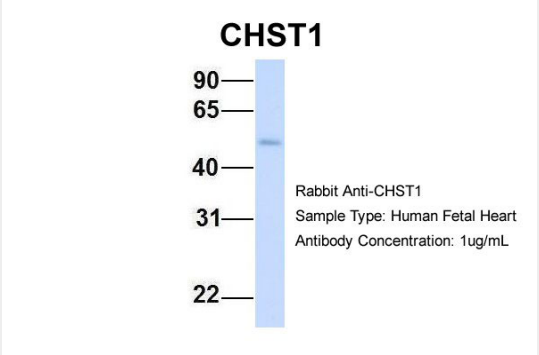
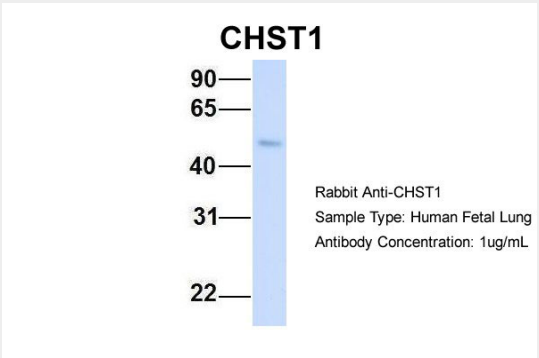


Host:Rabbit
Target Name:CHST1
Sample Tissue:Human Fetal Heart
Antibody Dilution: 1.0µg/ml



Host:Rabbit
Target Name:CHST1
Sample Tissue:Human Fetal Lung
Antibody Dilution: 1.0µg/ml

CHST1 antibody - middle region - References

Kitayama,K.,(2007)J.Biol.Chem.282(41),30085-30096ReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.