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CHST10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17499B

Specification

CHST10 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	O43529
Other Accession	NP_004845.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**42207**
Antigen Region	**208-236**

CHST10 Antibody (C-term) - Additional Information

Gene ID 9486

Other Names
Carbohydrate sulfotransferase 10, 282-, HNK-1 sulfotransferase, HNK-1ST, HNK1ST, HuHNK-1ST, CHST10

Target/Specificity
This CHST10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 208-236 amino acids from the C-terminal region of human CHST10.

Dilution
WB~~1:1000

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
CHST10 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CHST10 Antibody (C-term) - Protein Information

Name CHST10 {ECO:0000303|PubMed:23269668, ECO:0000312|HGNC:HGNC:19650}

Function Catalyzes the transfer of sulfate from 3'-phosphoadenylyl sulfate (PAPS) to position 3 of

terminal glucuronic acid of both protein- and lipid-linked oligosaccharides. Participates in biosynthesis of HNK-1 carbohydrate structure 3-O-sulfo-beta-D-GlcA-(1->3)-beta-D-Gal-(1->4)-D-GlcNAc-R, a sulfated glucuronyl-lactosaminyl residue carried by many neural recognition molecules, which is involved in cell interactions during ontogenetic development and in synaptic plasticity in the adult. May be indirectly involved in synapse plasticity of the hippocampus, via its role in HNK-1 biosynthesis (PubMed:9478973). Sulfates terminal glucuronyl residue of the laminin globular (LG)-domain binding epitope on DAG1/alpha-dystroglycan and prevents further polymerization by LARGE1 glycosyltransferase. Likely defines the chain length of LG epitope, conferring binding specificity to extracellular matrix components (PubMed:32149355). Plays a role in down-regulating the steroid hormones. Sulfates glucuronidated estrogens and androgens with an impact in hormone cycle and fertility. Has a preference for glucuronyl moiety at the 3-hydroxyl group of a sterol ring rather than the 17-hydroxyl group, showing high catalytic efficiency for 17beta-estradiol 3-O-(beta-D-glucuronate) and dehydroepiandrosterone 3-O-(beta-D-glucuronate) hormones (PubMed:23269668).

Cellular Location
Golgi apparatus membrane {ECO:0000250|UniProtKB:O54702}; Single-pass type II membrane protein

Tissue Location
In fetal tissues, it is predominantly expressed in brain, and weakly expressed in lung, kidney and liver. In adult, it is highly expressed in brain, testis, ovary, expressed at intermediate level in heart, pancreas, skeletal muscle, spleen and thymus, and weakly expressed in other tissues. In brain, it is expressed at higher level in the frontal lobe.

CHST10 Antibody (C-term) - 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

CHST10 Antibody (C-term) - Images

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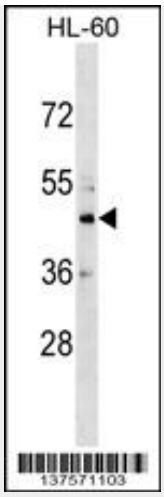

CHST10 Antibody (C-term) (Cat. #AP17499b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the CHST10 antibody detected the CHST10 protein (arrow).

CHST10 Antibody (C-term) - Background

Cell surface carbohydrates modulate a variety of cellular functions and are typically synthesized in a stepwise manner. HNK1ST plays a role in the biosynthesis of HNK1 (see MIM 151290), a neuronally expressed carbohydrate that contains a sulfoglucuronyl residue.

CHST10 Antibody (C-term) - References

Zhao, X., et al. Cancer Res. 69(12):5218-5225(2009)
Kang, H.G., et al. J. Biol. Chem. 277(38):34766-34772(2002)
Ong, E., et al. J. Biol. Chem. 274(36):25608-25612(1999)
Ong, E., et al. J. Biol. Chem. 273(9):5190-5195(1998)