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CHST10 Antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI16088

Specification

CHST10 Antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	O43529
Other Accession	XP_005264131
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**39kDa KDa**

CHST10 Antibody - C-terminal region - Additional Information

Gene ID 9486

Alias Symbol	**CHST10,**

Other Names
Carbohydrate sulfotransferase 10, 2.8.2.-, HNK-1 sulfotransferase, HNK-1ST, HNK1ST, HuHNK-1ST, CHST10

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 &mu, l of distilled water. Final Anti-CHST10 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
CHST10 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

CHST10 Antibody - C-terminal region - 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

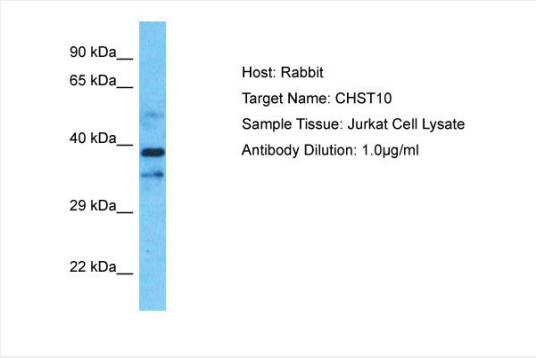
Tissue Location
In fetal tissues, it is predominantly expressed in brain, and weakly expressed in lung, kidney and liver. In adult, it is highly expressed in brain, testis, ovary, expressed at intermediate level in heart, pancreas, skeletal muscle, spleen and thymus, and weakly expressed in other tissues.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

CHST10 Antibody - C-terminal 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

CHST10 Antibody - C-terminal region - Images



Host: Rabbit
Target Name: CHST10
Sample Tissue: Jurkat Whole cell lysate
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Antibody Dilution: 1.0µg/ml

CHST10 Antibody - C-terminal region - Background

Catalyzes the transfer of sulfate to position 3 of terminal glucuronic acid of both protein- and lipid-linked oligosaccharides. Participates in biosynthesis of HNK-1 carbohydrate structure, 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.

CHST10 Antibody - C-terminal region - References

Ong E.,et al.J. Biol. Chem. 273:5190-5195(1998).
Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.