

NDST1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13224b

Specification

NDST1 Antibody (C-term) - Product Information

Application WB, IHC-P,E Primary Accession P52848

Other Accession <u>Q02353</u>, <u>Q3UHN9</u>, <u>NP 001534.1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
Rabbit IgG
820-849

NDST1 Antibody (C-term) - Additional Information

Gene ID 3340

Other Names

Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 1, Glucosaminyl N-deacetylase/N-sulfotransferase 1, NDST-1, N-heparan sulfate sulfotransferase 1, N-HSST 1, [Heparan sulfate]-glucosamine N-sulfotransferase 1, HSNST 1, Heparan sulfate N-deacetylase 1, 3---, Heparan sulfate N-sulfotransferase 1, 282-, NDST1, HSST1

Target/Specificity

This NDST1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 820-849 amino acids from the C-terminal region of human NDST1.

Dilution

WB~~1:1000 IHC-P~~1:10~50

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

NDST1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NDST1 Antibody (C-term) - Protein Information



Name NDST1 (HGNC:7680)

Synonyms HSST, HSST1

Function [Isoform 1]: Essential bifunctional enzyme that catalyzes both the N-deacetylation and the N-sulfation of glucosamine (GlcNAc) of the glycosaminoglycan in heparan sulfate (PubMed:<u>9230113</u>, PubMed:<u>9744796</u>, PubMed:<u>35137078</u>). Modifies the GlcNAc-GlcA disaccharide repeating sugar backbone to make N-sulfated heparosan, a prerequisite substrate for later modifications in heparin biosynthesis (PubMed:<u>9230113</u>). Plays a role in determining the extent and pattern of sulfation of heparan sulfate. Participates in biosynthesis of heparan sulfate that can ultimately serve as L-selectin ligands, thereby playing a role in inflammatory response (By similarity). Required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:<u>22660413</u>).

Cellular Location

[Isoform 1]: Golgi apparatus, trans-Golgi network membrane; Single-pass type II membrane protein. Golgi apparatus, cis-Golgi network membrane; Single-pass type II membrane protein

Tissue Location

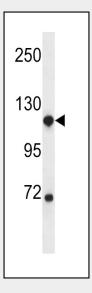
Widely expressed. Expression is most abundant in heart, liver and pancreas.

NDST1 Antibody (C-term) - Protocols

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

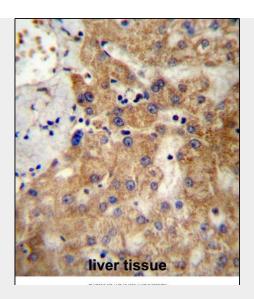
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NDST1 Antibody (C-term) - Images



NDST1 Antibody (C-term) (Cat. #AP13224b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the NDST1 antibody detected the NDST1 protein (arrow).





NDST1 Antibody (C-term) (Cat. #AP13224b)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of NDST1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

NDST1 Antibody (C-term) - Background

NDST1 is an essential bifunctional enzyme that catalyzes both the N-deacetylation and the N-sulfation of glucosamine (GlcNAc) of the glycosaminoglycan in heparan sulfate. Modifies the GlcNAc-GlcA dissacharide repeating sugar backbone to make N-sulfated heparosan, a prerequisite substrate for later modifications in heparin biosynthesis. Plays a role in determining the extent and pattern of sulfation of heparan sulfate. Compared to other NDST enzymes, its presence is absolutely required. Participates in biosynthesis of heparan sulfate that can ultimately serve as L-selectin ligands, thereby playing a role in inflammatory response.

NDST1 Antibody (C-term) - References

Yoshida, T., et al. Int. J. Mol. Med. 25(4):649-656(2010) Oguri, M., et al. Am. J. Hypertens. 23(1):70-77(2010) Duelli, A., et al. J. Immunol. 183(11):7073-7083(2009) Zuberi, R.I., et al. J. Immunol. 183(6):3971-3979(2009) Drenos, F., et al. Hum. Mol. Genet. 18(12):2305-2316(2009)