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NDST1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13224b

Product Information

Application	WB, IHC-P, E
Primary Accession	P52848
Other Accession	Q02353, Q3UHN9, NP_001534.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33030
Calculated MW	100868
Antigen Region	820-849

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, HSST, 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~~1:100~500 E~~Use at an assay dependent concentration.
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.

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:35137078, PubMed:9230113, PubMed:9744796). Modifies the GlcNAc-GlcA disaccharide repeating sugar backbone to make N-sulfated heparosan, a prerequisite substrate for later modifications in heparin biosynthesis (PubMed:9230113). 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:22660413).
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.

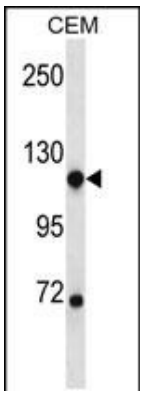
Background

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.

References

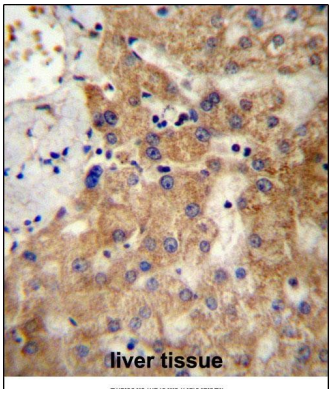
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Images



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.