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NDST1 Antibody

Catalog # ASC12107

Product Information

Application	WB, E
Primary Accession	P52848
Other Accession	NP_001534
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Clone Names	NDST1
Calculated MW	100868

Additional Information

Gene ID	3340
Alias Symbol	NDST1
Other Names	NDST1 Antibody: HSST, NST1, MRT46
Target/Specificity	NDST1 Antibody is predicted to not cross-react with NDST2.
Reconstitution & Storage	NDST1 antibody can be stored at 4˚C for three months and -20˚C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	NDST1 Antibody 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 a member of the heparan sulfate/heparin GlcNAc N-deacetylase/ N-sulfotransferase family. It is a type II transmembrane protein that resides in the Golgi apparatus. The encoded protein catalyzes the transfer of sulfate from 3'-phosphoadenosine 5'-phosphosulfate to nitrogen of glucosamine in heparan sulfate.