

**NDST1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP13224b****Specification**

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**NDST1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [P52848](#)**NDST1 Antibody (C-term) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody AP13224b was selected from the C-term region of NDST1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**NDST1 Antibody (C-term) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/9230113" target="\_blank">9230113</a>, PubMed:<a href="http://www.uniprot.org/citations/9744796" target="\_blank">9744796</a>, PubMed:<a href="http://www.uniprot.org/citations/35137078" target="\_blank">35137078</a>). Modifies the GlcNAc-GlcA disaccharide repeating sugar backbone to make N-sulfated heparosan, a prerequisite substrate for later modifications in heparin biosynthesis (PubMed:<a href="http://www.uniprot.org/citations/9230113" target="\_blank">9230113</a>). 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:<a href="http://www.uniprot.org/citations/22660413" target="\_blank">22660413</a>).

**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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**NDST1 Antibody (C-term) Blocking Peptide - Images****NDST1 Antibody (C-term) Blocking Peptide - 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 disaccharide 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) Blocking Peptide - 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)