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# NDST1 Antibody

Catalog # ASC12107

## Product Information

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

## Additional Information

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| **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

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| **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). |

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| **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.

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