

## **NDST2 Antibody**

Catalog # ASC11818

#### **Specification**

## **NDST2 Antibody - Product Information**

Application WB, IF Primary Accession P52849

Other Accession
Reactivity
NP\_003626, 4505353
Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG

Calculated MW Predicted: 97 kDa

Application Notes

Observed: 101 kDa KDa

NDST2 antibody can be

NDST2 antibody can be used for detection of PDCL by Western blot at 1 - 2  $\mu$ g/ml. For immunofluorescence start at 20  $\mu$ g/mL.

#### **NDST2 Antibody - Additional Information**

Gene ID 8509

**Target/Specificity** 

NDST2; NDST2 antibody is human, mouse and rat reactive. At least two isoforms of NDST2 are known to exist; this antibody will only detect the larger isoform. NDST2 antibody is predicted not to cross-react with other members of the NDST protein family.

### **Reconstitution & Storage**

NDST2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

## **Precautions**

NDST2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **NDST2 Antibody - Protein Information**

Name NDST2

**Synonyms** HSST2

#### **Function**

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. Required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:<a href="http://www.uniprot.org/citations/22660413">http://www.uniprot.org/citations/22660413</a> target="blank">22660413</a>.

## **Cellular Location**



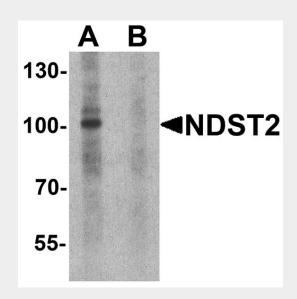
Golgi apparatus membrane; Single- pass type II membrane protein

# **NDST2 Antibody - Protocols**

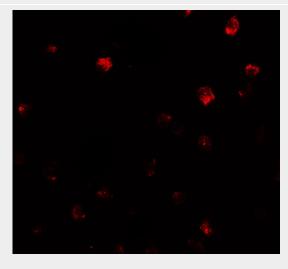
Provided below are standard protocols that you may find useful for product applications.

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

# **NDST2 Antibody - Images**



Western blot analysis of NDST2 in A-20 cell lysate with NDST2 antibody at 1  $\mu$ g/ml in (A) the absence and (B) the presence of blocking peptide.



Immunofluorescence of NDST2 in Daudi cells with NDST2 antibody at 20 µg/ml.



# NDST2 Antibody - Background

The N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 2 (NDST2) protein, also known as N-heparan sulfate sulfotransferase 2, and the highly related protein NDST1 have key roles in the sulfation of heparan sulfate proteoglycans, molecules that are present of cell surfaces and the extracellular matrix (1,2). NDST1 and NDST2 are dispensable for mesodermal differentiation into osteoblasts but necessary for induction of adipocytes and neural cells (3).

# **NDST2 Antibody - References**

Humphries DE, Lanciotti J, and Karlinsky JB. cDNA cloning, genomic organization and chromosomal localization of human heparan glucosaminyl N-deacetylase/N-sulphotransferase-2. Biochem. J. 1998; 332:303-7.

Esko JD and Selleck SB. Order out of chaos. Assembly of ligand binding sites in heparan sulfate. Annu. Rev. Biochem. 2002; 71:435-71.

Forsberg M, Holmborn K, Kundu S, et al. Undersulfation of heparan sulfate restricts differentiation potential of mouse embryonic stem cells. J. Biol. Chem. 2012; 287:10853-62.