10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NDST2 Antibody
Catalog # ASC11818

Specification

NDST2 Antibody - Product Information

Application	**WB, IF**
Primary Accession	P52849
Other Accession	NP_003626, 4505353
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 97 kDa** **Observed: 101 kDa KDa**
Application Notes	**NDST2 antibody can be used for detection of PDCL by Western blot at 1 - 2 µg/ml. For immunofluorescence start at 20 µg/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℃ for three months and -20℃, 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:22660413).

Cellular Location

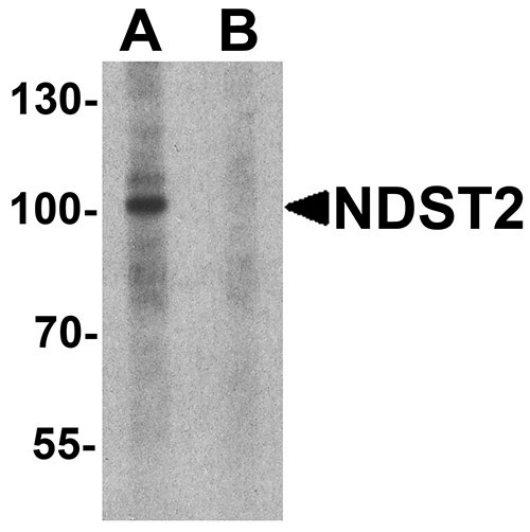
Golgi apparatus membrane; Single- pass type II membrane protein

NDST2 Antibody - Protocols

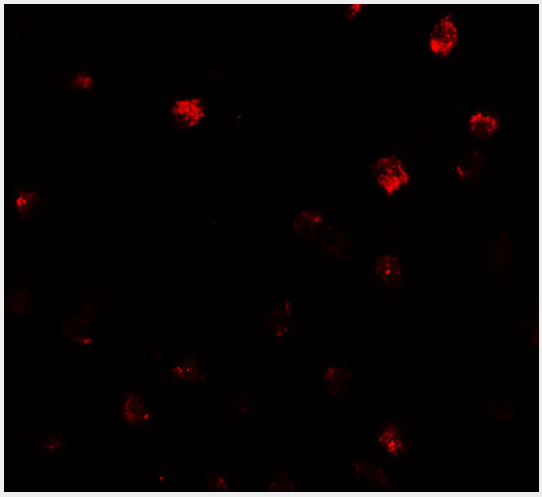
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NDST2 Antibody - Images



Western blot analysis of NDST2 in A-20 cell lysate with NDST2 antibody at 1 µg/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.