

## Product datasheet for **MC222369**

### **Ndst1 (NM\_008306) Mouse Untagged Clone**

#### **Product data:**

<b>Product Type:</b>	Expression Plasmids
<b>Product Name:</b>	Ndst1 (NM_008306) Mouse Untagged Clone
<b>Tag:</b>	Tag Free
<b>Symbol:</b>	Ndst1
<b>Synonyms:</b>	1200015G06Rik; b2b2230Clo; Hsst; NDST-1
<b>Mammalian Cell Selection:</b>	Neomycin
<b>Vector:</b>	pCMV6-Entry (PS100001)
<b>E. coli Selection:</b>	Kanamycin (25 ug/mL)
<b>Restriction Sites:</b>	Sgfl-MluI
<b>ACCN:</b>	NM_008306
<b>Insert Size:</b>	2649 bp
<b>OTI Disclaimer:</b>	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
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**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_008306.4](#), [NP\\_032332.2](#)

**RefSeq Size:** 6088 bp

**RefSeq ORF:** 2649 bp

**Locus ID:** 15531

**UniProt ID:** [Q3UHN9](#)

**Cytogenetics:** 18 E1

**Gene Summary:** 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. Required for the exosomal release of SDCBP, CD63 and syndecan (By similarity).  
[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (1) represents the longest transcript. Variants 1-5 encode the same isoform (1).