

Product datasheet for **RC239641**

NDST1 (NM_001301063) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDST1 (NM_001301063) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NDST1
Synonyms:	HSST; MRT46; NST1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC239641 representing NM_001301063
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCTGCCTGGCATGCCTCCGGAGGCTGTGTGGCAGCTGTCCCCGAGGCTGTCTTTTCTGTCTGT
 TCATCTTCTGCCTGTTTCAGCGTTTTTCATCTCGGCCTACTACCTATATGGCTGGAAGCGAGGCCTGGAGCC
 CTCGGCGGATGCCCCGAGCCTGACTGCGGGGACCCGCCCTGTGGCCCCAGTCGCTGCTGCCACTC
 AAGCCTGTGCAGGCAGCCACCCCTTCCCGCACAGACCCGTTGGTGTGGTCTTTGTGGAGAGCCTTACT
 CGCAACTGGGCCAGGAGGTGGTGGCCATCTGGAGTCCAGCCGCTTCAAATACCGCACAGAGATTGCGCC
 GGGCAAGGGTGACATGCCACGCTCACTGACAAGGGCCGTGGCCGCTTCGCCCTCATCATATGAGAAC
 ATCCTCAAGTATGTCAACCTGGACGCTGGAACCGGGAGCTGCTGGACAAGTACTGTGTGGCCTACGGCG
 TGGGCATCATTGGCTTCTCAAGGCCAATGAGAACAGCCTGCTGAGTGGCAGCTCAAGGGCTTCCCCT
 GTTCCTGCACTCAAACCTGGGCCTGAAGGACTGCAGCATCAACCCCAAGTCCCCGCTGCTCTACGTGACG
 CGACCTAGCGAGGTGGAGAAAGTGTGCTCCCCGGCGAGGACTGGACGGTTTTCCAGTCAAATCACTCCA
 CCTATGAGCCAGTGTGCTGGCCAAGACGCGCTCGTCTGAGTCCATCCCACACCTGGGCGCAGACGCCGG
 CCTGCATGCTGCACTGCACGCCACTGTGGTCCAGGACCTGGGCCTGCACGACGGCATCCAGCGCGTGTG
 TTTGGCAACAACCTGAACCTCTGGCTGCACAAGCTTGTCTTCGTGGATGCCGTGGCCTTCTCACGGGGA
 AGCGCCTCTCCCTGCCATTGGACCGCTACATCTGGTGGACATTGATGACATCTTCGTGGCAAGGAGGG
 CACACGCATGAAGGTGGAGGACGTGAAGGCCCTGTTTACACACAGAACGAACACTACGCGCACACATCCCA
 AACTTCACCTTCAACCTGGGCTACTCAGGAAAATCTTCCACACAGGTACCAATGCTGAGGACCTGGGG
 ATGATCTGCTGCTCGTATGTGAAGGAGTTCTGGTGGTTCGCCACATGTGGAGCCACTGCAGCCCCA
 CCTTTTCCACAACCAAGTCCGTGTTGGCCGAGCAGATGGCCTTGAACAAGAAGTTCGCTGTGAGCATGGC
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 ACGAGGCTTGAAGCAGGTGTGGAGCATCCGCGTGACCAGCACGGAGGAGTACCCCCACCTGAAGCCAGC
 CCGCTACCGCGTGGCTTCATCCACAATGGCATCATGTTCTCCACGGCAGACCTGCGGCCTTTCACA
 CACACCATCTTACAACGAGTACCCTGGCGGCTCCAGTGAAGTGGACAAGATCATCAACGGGGGCGAGC
 TCTTCTCACCGTGTCTCAATCCTATCAGCATCTTCATGACGCACCTGTCCAATATGGGAATGACCG
 CCTGGCCTGTACACCTCAAGCACCTGGTGGCTTCTGCACCTCTGGACGAACCTCCGGCTGCAGACA
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 GCATCGACTGGTACATGGAGTCTTCCCATCCCTTCAAACACCACCTCCGACTTCTACTTTGAGAAAAG
 CGCCAATACTTTGATTCAGAAGTGGCGCCCGGGCGGCGAGCAGCCCTTGGCCAAAGCCAAGGTCCTG
 ACCATCCTCATCAACCCCGGACCCGGGCTATTCCTGGTACCAGATTCTGGTCTGGATGGCAAATGCTG
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 CCACAAAACCTTGGCGTTTGCATCCAAAGAAAGGATTTTGGTGCCAACCTTGAAGGAGGAAAAACCAAG
 TGCTGGGCAAAAAGCAAGGGCCGAAAATATCCCGAGATGGACTTGGATTCCCGAGCCTTCTGAAGGACT
 ATTACCGGACCAACATCGAGCTCTCAAGCTGCTGTATAAGATGGGCCAGACACTTCCCACTTGGCT
 ACGAGAGGACCTCCAGAACCAGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239641 representing NM_001301063
Red=Cloning site Green=Tags(s)

MPALACLRRLCRHVSPQAVLFLLFIFCLFSVVISAYLYGWKRGLEPSADAPEPCDGDPPPVPASRLLPL
KPVQAATPSRTDPLVLFVESLYSQLGQEVVAILESSRFKYRTEIAPGKGDMPRTLTDKGRGRFALIIYEN
ILKYVNLDAWNRELLDKYCVAYGVGIIIGFFKANENSLLSAQLKGFPLFLHSNLGLKDCSINPKSPLLYVT
RPSEVEKGVLPGEDWTVFQSNHSTYEPVLLAKTRSESIPHLGADAGLHAALHATVVQDLGLHLDGIQRVL
FGNNLFWLHKLVFVDAVAFLTGKRLSLPLDRYILVDIDDI FVGKEGTRMKVEDVKALFDTQNELRAHIP
NFTFNLGYSGKFFHTGTNAEDAGDLLLLSYVKEFWWFPHMWSMQPHLFHNQSVLAEQMALNKKFAVEHG
IPTDMGYAVAPHHSGVYPVHVQLYEAWKQVWSIRVTSTEEYPHLKPARYRRGFIHNGIMVLPRTQGLFT
HTIFYNEYPGGSSELDKIINGGELFTVLLNPISIFMTHLSNYGNDRLGLYTFKHLVRFHLSWTNLRQLT
LPPVQLAQKYFQIFSEEKDWQPCEDKRHKDIWSKEKTCDRFPKLLIIGPQKTGTTALYFLGMHPDL
SSNYPSSETFEEIQFFNGHNYHKGIDWYMEFFPIPSNTTSDFYFEKSANYFDSEVAPRRAAALLPKAKVL
TILINPADRAYSWYQILVLDGKLLRTEPAKVMVMVQKFLGVTNTIDYHKTLAFDPKKGFWCQLLEGGKTK
CLGKSKGRKYPMDLDSRAFLKDYRDHNIELSKLLYKMGQTLPTWLREDLQNT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

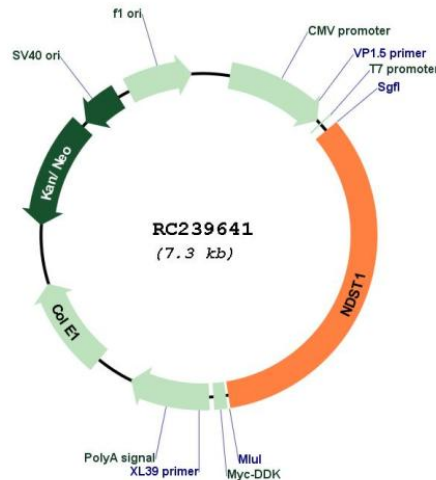
Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001301063

ORF Size: 2475 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: 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).

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_001301063.2](#)

RefSeq Size: 7970 bp

RefSeq ORF: 2478 bp

Locus ID: 3340

UniProt ID: [P52848](#)

Cytogenetics:	5q33.1
Protein Families:	Transmembrane
Protein Pathways:	Heparan sulfate biosynthesis, Metabolic pathways
MW:	94.8 kDa
Gene Summary:	This gene encodes a member of the heparan sulfate/heparin GlcNAc N-deacetylase/ N-sulfotransferase family. The encoded enzyme 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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]