

## Product datasheet for **RG207792**

### **NDST2 (NM\_003635) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NDST2 (NM_003635) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NDST2
Synonyms:	HSST2; N-HSST 2; NST2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG207792 representing NM\_003635  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTCCAGTTGTGGAAGGTGGTACGCCAGCTCGGCAGCTGGAAGTGCACCCGCTCATACTGCTGCTGA  
 TCGCTTTCAGCCTGGGCTCCATGGGCTTCTGGCTTATTATGTGTCCACCAGCCCTAAGGCCAAGGAACC  
 CTTGCCCTGCCCTTGGGAGACTGCAGCAGCGGTGGGCGAGCTGGTCTGGCCCTGCACGGCCTCCAGTT  
 CCACCTCGGCCCCAGGCCTCCAGAGACAGCTCGAACTGAACCCGTGGTCTTGTGTTGTGGAGAGTG  
 CATACTCACAGCTGGGGCAGGAAATTGTGGCCATCCTGGAGTCTAGTCGTTTTCTGTATAGCACTGAGTT  
 GGCACCTGGCCGAGGGGACATGCCACATTGACTGATAATACCCATGGCCGCTATGTCTTGGTCATTTAT  
 GAGAACCTGCTCAAGTATGTCAACCTGGATGCCTGGAGTCGGAACTGCTAGACCCGCTACTGCGTGGAGT  
 ATGGTGTGGGCATCATTGGCTTTTTCCGAGCCCACGAGCACAGCCTACTGAGCGCCAGCTCAAGGGCTT  
 TCCCTTTTTTTACACTCAAACCTGGGGCTCCGGGACTACCAAGTGAATCCTTCTGCCCCGCTACTGCAT  
 CTCACACGCCCCAGCCGCTAGAACCCAGGGCCACTGCCTGGTGTGACTGGACCATCTTCCAATCCAATC  
 ATAGTACATATGAACCAGTGCTTCTTGCCAGCCTTCGGCCAGCTGAGCCCGCAGTGCCAGGACCAGTTCT  
 TCGTCGGGCCCGGCTTCCCACTGTGGTACAGGACCTGGGGCTTATGATGGCATCCAGCGGGTGTCTTT  
 GGACATGGCCTTCTTCTGGCTCCACAACTTATCTTCTGTTGATGCTGTTGCATACCTCACTGGCAAGC  
 GCCTCTGCCTGGACCTTGACCGCTACATCTTGGTAGACATCGATGACATCTTTGTGGCAAGGAAGGGAC  
 CCGCATGAAGGTGGCTGATGTTGAGGCTCTGTTGACCACCCAGAACAACCTCAGGACCTTAGTCCCAAC  
 TTCACCTTCAACTTGGGCTTCTCGGGCAAGTCTATCATACTGGGACAGAGGAGGAGGATGCAGGGGACG  
 ACATGCTGCTGAAGCACCCGAAAGAGTTCTGGTGGTTCCTCCACATGTGGAGCCACATGCAGCCACACT  
 GTTCCACAATCGCTCCGTGGCTGGCTGACCAGATGAGGCTCAACAACAGTTTGTCTGGAGCATGGGATT  
 CCCACGGACCTGGGGTATGCTGTGGCCCCCACCCTCGGGTGTGTACCCCATCCACACGCACTCTATG  
 AGGCCTGGAAATCCGTGTGGGCATCCAGGTGACCAGCACTGAGGAGTATCCCCATCTCCGCCCTGCCCG  
 CTACCGCCGTGGCTTCATTACAATGGCATTATGGTGTGCCCCGGCAGACATGTGGCCTCTTCACTCAC  
 ACAATCTTCTATAATGAGTATCCTGGAGGCTCTCGTGAAGTACAGCCGAGCATCCGAGGTGGAGAGCTCT  
 TTCTGACAGTGTGCTTAATCCGATCAGCATCTTATGACCCATCTGTCCAATTATGAAATGACCCGGCT  
 GGGCCTATACACCTTTGAGAGCTTGGTGCCTTCTCCAGTGTGGACACGGCTGCGCCTACAGACCCTT  
 CCTCTGTCCCCTTGCACAGAAGTACTTTGAACTTTTCCCTCAGGAGCGAAGCCCCCTTTGGCAGAATC  
 CCTGTGATGACAAGAGGCACAAAGATATCTGGTCCAAGGAGAAAACCTGTGATCGTCTCCCGAAGTTCCT  
 CATTGTGGGACCCAGAAAACAGGGACTACAGCTATTCACCTTCTTCTGAGCCTGCACCCAGCTGTAAC  
 AGCAGCTTCCCTAGCCCCAGCACATTTGAGGAGATTGAGTTCTTCAACAGCCCTAATTACCACAAGGGTA  
 TTGACTGGTACATGGATTTCTTCCCTGTTCCTTCCAATGCCAGCACTGATTTCTATTTGAAAAAAGTGC  
 CACCTACTTTGACTCTGAAGTTGTACCACGGCGGGGGGCTGCCCTCCTGCCACGAGCCAAGATCATCACA  
 GTGCTACCAACCCTGCTGACAGGGCTACTCCTGGTACCAGCATCAGCGAGCCCATGGAGACCCAGTTG  
 CTCTGAACTATACCTTCTATCAGGTGATTTGAGCCTCTCCAGACCCCTCTGGCACTACGCTCCCTGCA  
 GAACCCCTGTCTTGTCCCTGGCTACTATTCTACCCATCTACAACGCTGGCTGACTTACTACCCCTTGG  
 CAGTTGCTGATTGTGGATGGCAAGAGCTGCGTACCAACCCAGCAGCCTCAATGGAGAGCATCCAGAAGT  
 TCTGGGTATCACACCCTTCTGAACTACACACGGACCCTCAGGTTTGTGATGATAAGGGATTTTGGTG  
 CCAGGGACTTGAAGGTGGTAAGACTCGCTGTCTAGGCCGGAGCAAGGCCGGAGGTATCCAGATATGGAC  
 ACTGAGTCCCGTCTTTTCTTACGGATTTTTCCGGAACCATAATTTGGAGTTGTGCAAGCTGCTGAGCC  
 GGCTTGGACAGCCAGTGCCTCTGGCTTCGGGAAGAACTGCAGCATTCCAGTCTGGGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

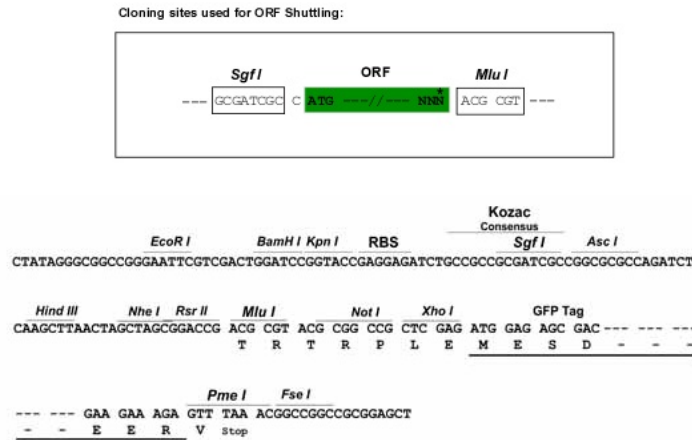
Protein Sequence: >RG207792 representing NM\_003635  
 Red=Cloning site Green=Tags(s)

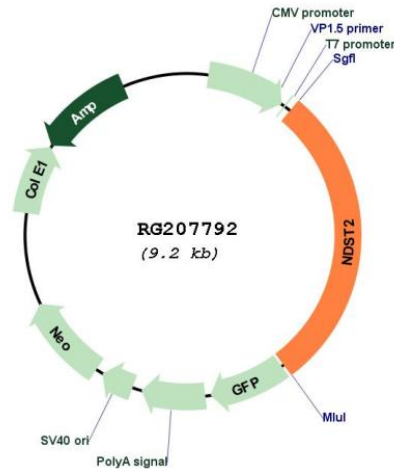
MLQLWKVVRPARQLELHRLILLIAFSLGSMGFLAYYVSTSPKAKEPLPLPLGDCSSGGAAGPGPARPPV  
 PPRPPRPETARTEPVVLVVFESAYSQLGQEIIVALESSRFRYSTELAPGRGDMPTLTDNTHGRYLVVIY  
 ENLLKYVNLDAWSRELLDRYCVYGVGIIGFFRAHEHSLLSAQLKGFPLFLHNSLGLRDYQVNPAPLLH  
 LTRPSRLEPGPLPGDDWTFIQSNHSTYEPVLLASLRPAEPAVPGPVLRRARLPTVVQDLGLHDGIQVLF  
 GHGLSFWLHKLIFVDAVAYLTGKRLCLDLDRYILVDIDDFVVGKEGTRMKVADVEALLTTQNKLRTLVFN  
 FTFNLGFSGKFYHTGTEEDAGDDMLLKHRRKEFWWFPHMWSHMQPHLFHNRSVLADQMRLNKQFALEHGI  
 PTDLGYAVAPHHSGVYPIHTQLYEAWKSVWGIQVTSTEEYPHLRPARYRRGF IHNGIMVLPRTQCGLFTH  
 TIFYNEYPGSRELDRSIRGGELFTVLLNPISIFMTHLSNYGNDRLGLYTFESLVRFLQCWTRLRLQTL  
 PPVPLAQKYFELFPQERSPLWQNPCDDKRHKDIWSKEKTCDRLPKFLIVGPQKTGTTAIHFFLSLHPAVT  
 SSFPSPSTFEEIQFFNSPNYHKIDWYMDFFPVPSNASTDFLFEKSATYDFSEVVPRRGAALLPRAKIIT  
 VLTNPADRAYSWYQHQRAGDPVALNYTFYQVISASSQTPLALRSLQNRCLVPGYYSTHLQRWLTYYPSG  
 QLLIVDQELRTNPAASMESIQFLGITPFLNYTRTLRFDDDKGFWCQGLEGGKTRCLGRSKGRRYPDMD  
 TESRFLFLTDFFRNHLELSKLLSRLGQVPVSWLREELQHSSLG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_003635

**ORF Size:** 2649 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\\_003635.4](#)

**RefSeq Size:** 3778 bp

**RefSeq ORF:** 2652 bp

**Locus ID:** 8509

**UniProt ID:** [P52849](#)

<b>Cytogenetics:</b>	10q22.2
<b>Domains:</b>	Sulfotransfer
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Heparan sulfate biosynthesis, Metabolic pathways
<b>Gene Summary:</b>	This gene encodes a member of the N-deacetylase/N-sulfotransferase subfamily of the sulfotransferase 1 proteins. The encoded enzyme has dual functions in processing glucosamine and heparin polymers, including N-deacetylation and N-sulfation. The encoded protein may be localized to the Golgi. [provided by RefSeq, Feb 2009]