

## Product datasheet for **MR217087**

### **Ndst3 (NM\_031186) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ndst3 (NM_031186) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ndst3
Synonyms:	4921531K01Rik; 4930511P15Rik; N-HSST 3; NDST-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR217087 representing NM\_031186  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGTTTTATCATGAAACCTCACAGACACTTTTACAGAGAACACTGATTCTGCTTGCCACCTTTTGTATGG  
 TAAGCATTATTATTTCTGCTTACTACCTGTACAGCGGCTACAAACAGGAAAGTGAAGTCTCCGGGGGGC  
 TTCGGAAGTGACTGTGGTGACCTCCAGACATACCATCCAGGCTGATGGAAGTGAGGAGACAATGATT  
 TCCGATGCTTCAAGGACAGACCCACAGTCTGGTGTGGTGGAGAGCCAGTACTCATCCCTTGGTCAAG  
 ACATCATTATGATGCTAGAATCCATCCGGTTCATTATCACACTGAAATCGTCTCGGAAAAGGAGATCT  
 TCCGGCACTTACAGACAATGTGAAGGGCAAATATGTTCTCATTATATGAGAATATTCTAAAGTATATA  
 AACATGGACTCTTGAATAGAAGCCTTTAGATAAATACTGTATAGAGTATGGTGTGGGTATCATTGGAT  
 TCCATAAAACCAGTGAGAAAACTACAGAGCTTTCAGTTCAGGGGCTTCCCTTTTCCATAAGTGGAAA  
 CCTGGCAGTAAAAGATTGCTGTATTAATCCTCACTCCCCACTCCTTCGTGTGACCAAATCATCCAAGCTG  
 GACAGAGTTCTCTACCTGGAACGACTGGACAGTTTTTTCAGATTAACCACTCCACCTACCGCCAGTAA  
 TATTTGCCAAAGTTAAGACTCCAGAAAACCTTTCTCCTCCCATCTCTAAACATGCATTTTATGCCACTAT  
 CATACACGACCTGGGGCTTCATGACGGGATCCAGCGAGTCTTTTTGGCAACAACCTTGAACCTTGGCTA  
 CACAAGCTCATCTTCATAGACGCCATCTCCTTCTGTGCGGGAAGAGGCTGACACTGTCTTGGACAGGT  
 ACATCCTTGTGGACATTGACGACATATTTGTAGGGAAGGAGGGCACAAGGATGAACACCAATGATGTGAA  
 GGCCCTGCTTGACACTCAGAATCTTTGCGCACACAAATCACAAATTTTACATTCACCTTGGATTTTCA  
 GGGAAATTTTATCACACAGGAACCTGAAGAGGAAGTGAAGGGGATGATTGTCTGCTGGGTCTGTGGACG  
 AGTTCAGTGGTTCCTCACATGTGGATCACATGCAGCCCCACTTCCACAATGATGCCTCTTTAAT  
 AGAGCAGATGATTCTCAACAAAAAGTTTGCCTTAGAGCACGGCATCCCTACCGATATGGGATATGCAGTG  
 TCCCTCACCAATTCAGGTGTCTACCCTGTCCATGTTTCAGCTTTATGAGGCTGGAAGAAGGTTTGAATA  
 TAAAAATCACCAGCACTGAAGAATATCCACATCTGAAACCAGCTAGATATCGGAGAGGCTTCATTCACAA  
 AAACATCATGGTTCCTCCAAGACAAACCTGTGGGCTCTTACCCACACAATTTTACAAGGAGTATCCA  
 GGGGGTCCAGGGAACCTGGACAAGAGTATTCATGGAGGGGAGCTTCTTCACTGTGGTCTCAACCCAA  
 TCAGTATTTTATGACCCATTTGTCTAACTATGGAACGACCGACTGGGATTATACATTTGTGAATCT  
 AGCCAATTTTGTGACAGCTGGACCAACCTGCGTCTTCAGACCTTGCTCCAGCTCAGCTGGCTCACAAG  
 TATTTTGAAGCTTTTCTGATCAGAAAGACCCTCTCTGGCAGAACCCTGTGATGACAAACGCCACAGAG  
 ACATTTGGTCTAAAGAGAAAACCTGCGATCGTTTACAAAATCTTGGTAAATAGGACCCAGAAAACCTGG  
 TACCCTGCCTTGTGCTGTTCCCTGATTATGCATCCTTCCATCCTTAGTAACTCCCCAGCCAAAATCC  
 TTTGAGGAGGTACAGTCTTTAATAGAAAATACTACCACAGGGGGATTGATTGGTACATGGATTTCTTCC  
 CAGTCCCCTAATGTCACCACTGACTTTCTGTTTGAAGAGTGTCTAATTAATTCATTCCATTGAGGACGC  
 TCCAAGAGGGCTGCTTCTAGTCCCAGAAAGCCAAAATCATCACCATACTCATTGACCCGTGAGCCGA  
 GCGTACTCCTGGTATCAGCATCAGCGATCCCATGAAGACCCTGCAGCTCTGAAATTTAGCTTCTATGAAG  
 TGATCTCTGCTGGGCCAATGCACCCTGGGAACCTCGAACCCTGCAGAAGAGATGCCTGGTCCCTGGGTG  
 GTATGCCAACCATCGAGAGATGGCTTGTATTTCCCTCCATTTTCAGTTGCTAATCATTGATGGACAG  
 CAGCTAAGAACTACCCCTGCGACAGTATGGATGAAGTCCAGAAGTTTCTAGGAGTCTCACCTCATTATA  
 ATTACTCCGAAGCTTTAACGTTTATTCTCATAAAGGCTTCTGGTGTGAGCTGCTGGAAGAAGGGAAAAC  
 AAAATGCCTTGGGAAGAGTAAAGGAAGAAAATACCCCGGATGGACTCTGATAGCAGAGCGTTTCTGTCC  
 AGCTACTACCGGACCACAACGTGGAGCTCTCGAAGCTGCTGCACAGGCTGGGGCAGCCTCTGCCCTCT  
 GGCTGAGACAGGAGCTGCAGAAAGTGAGG

**ACGGCT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR217087 representing NM\_031186  
 Red=Cloning site Green=Tags(s)

MSFIMKPHRHFQRTLILLATFCMVSIIISAYLYSGYKQESEVSGRASEVDCGDLQHIPSRLMEVRRMTI  
 SDASRTDPTVLVFVESQYSSLGQDIIMLESIRFHYHTEIAPGKGDLPALTDNVKGYVLIYENILKYI  
 NMDSWNRSLLDKYCIEYGVGIIGFHKTSEKNLQSFQFRGFPFSISGNLAVKDCINPHSPLLRVTKSSKL  
 DRGSLPGTDWTVFQINHSTYQPVIFAKVKTPELNSPPIKSHAFYATIIHDLGLHDGIQRVLFGNLNF  
 HKLIFIDAISFLSGKRLTSLDRYILVDIDDFVVGKEGTRMNTNDVKALLDTQNLRLRTQITNFTFNLGFS  
 GKFYHTGTEEEDEGDDCLLGSVDEFWFWPHMWSHMOPHLFHNESSLIEQMILNKKFALEHGIPDMGYAV  
 SPHHSQVYPVHVQLYEAWKVVWNIKITSTEEYPHLKPARYRRGF IHKNIMVLPRTQCLGFTHTFYKEYP  
 GGPREDKSIHGELFFTVVLPISIFMTHLSNYGNDRLGLYTFVNLANFVQTWTNLRQLTLPQAQLAHK  
 YFELFPDQKDPWQNPCCDKRHRDIWSKEKTCDRPKFLVIGPQKTGTALCLFLIMHPSILSNSPSKS  
 FEEVQFNRNNYHRGIDWYMDFFPVPVSNVTTDFLFEKSANYFHSEDAPKRAASLVPKAKIITILIDPSDR  
 AYSWYQHQRSHPAALKFSFYEVISAGPNAPWELRTLQKRCVPGWYANHIERWL VYFPPFQLIIDGQ  
 QLRTTPATVMDEVQKFLGVSPHYNYSEALTFDSHKGFWCQLLEEGKTKCLGKSKGRKYPPMDSDSRAFLS  
 SYRDHNVLSKLLHRLGQPLPSWLRQELQKVR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9003\\_e03.zip](https://cdn.origene.com/chromatograms/mm9003_e03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

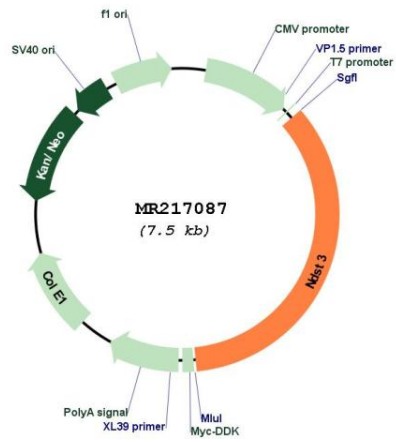
Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

<b>ACCN:</b>	NM_031186
<b>ORF Size:</b>	2619 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_031186.3</a> , <a href="#">NP_112463.2</a>
<b>RefSeq Size:</b>	5361 bp
<b>RefSeq ORF:</b>	2622 bp
<b>Locus ID:</b>	83398
<b>UniProt ID:</b>	<a href="#">Q9EQH7</a>
<b>Cytogenetics:</b>	3 G1
<b>MW:</b>	101.5 kDa
<b>Gene Summary:</b>	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. Has high deacetylase activity but low sulfotransferase activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217087