

Product datasheet for **MR218546**

Ndst4 (NM_022565) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ndst4 (NM_022565) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ndst4
Synonyms:	4930439H17Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR218546 representing NM_022565
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATCTTATTTTAAAGTTTCGAAGAAGCTTTTCAACACTGATTGTTCTTAGCTACTTTTTGCTTGG
 TGAGCATCCTCATTCTGCCTACTTCTGTACTCTGGCTACAAACAGGAAATGACTTATTGAAACGAC
 TGCAGAAGCAGAGTGTGCTGACATCAAAGACCTCCCTTATCGGTCTATAGAGCTGAGAACCATCAAGCCT
 ATTGATACATCCAAAACGACCCCACTGTCTTCTCTTTGTAGAGAGCCAGTATTCGCAACTTGGTCAAG
 ATATTATAGCAATCTTGGAGTCCAGTCCGTTTCAATACCAGATGGTCATTGCTCCAGGCAAGGGAGACAT
 ACCGCCTCTTACCGATAGTGGCAAAGGGAAGTACACATTGATTATTTATGAAAATATTCTGAAGTACGTC
 AGCATGGACTCATGGAACCGGGAGCTTTAGAAAAATACTGTATAGAATACAGTGTAGCATAATTGGTT
 TTCATAAAGCCAATGAGAACAGTTTACCAACTACACAACGAAAGGGTTTCTTTGAACTTATTCAATAA
 CGTAGCTCTGAAGGACTGCTCTGTGAACCCCACTCTCCTCTGCTCCATATTACCAAAGGCCCAAAGTT
 GAAAAGGGACCTCTTCTGGGGAAGACTGGACAATTTTCCAGTATAACCATTTCTACCTATCAGCCAGTGC
 TTTAACTGAGTTACAGTCAGAAAAGTCCCTCTCTTTCTGTCCAGCCAAACACTTTATGCGACAATTAT
 TCAGGATCTGGGGCTTCATGACGGGATTACGCGAGTCTTTTTGGTAACAACCTGAACTTTTGGTTGCAC
 AAGCTCATTTTTCATAGACGCCATCTCCTTCTGTGCGGGAAGAGGTTGACTGTCTTGGACAGGTACA
 TCCTTGTGGACATTGATGACATATTTGTGGGGAAGGAGGGCAGAGAATGAATGTCAAAGATGTGAAGGC
 ATTACTAGAGACTCAAAATTTACTGCGCACTCAGGTTGCAAAATTTACCTTCAACCTTGGATTTTCAGGG
 AAGTTTTACCACACAGGAACCGAAGAAGAGGATGAAGGTGACGACCTTCTGCTGAGGCTGTGGATGAAT
 TCTGGTGGTTTCTCACATGTGGAGTCACATGCAGCCCCACCTTCCACAATGAATCATCTTTAGTGGGA
 ACAGATGATTCTCAACAAGAATTTGCCCTGGAACATGGAATTCGATCAACCTGGGCTACGCAGTGGCC
 CCACATCACTCAGGGTCTACCCAGTCCATATTAGTTGTATGCAGCTTGGAAAGAAAGTCTGGGGTATTC
 AGGTCACCAGCACTGAAGAGTACCACATCTGAAACCTGCGCGGTACAGGAAGGGCTTCATTATAATAG
 CATCATGGTCTCCCTCGACAGACCTGTGGGCTGTTACACATACTATTTTCTACAAGGAGTATCCAGGA
 GGACCTCAAGAATTGGATAAAAGTATCAAAGGAGGTGAACTTCTCCTCACAACTCTTCTAAATCCAATCA
 GCATTTTCATGACACATCTTTCTAACTATGAAATGACCGCTCGGCTTGTACACCTTTGTGAACCTGGC
 CAACCTTTGTGCACAGCTGGACCAACTTGAACCTGCAGACCCTGCCTCCAGTGAACCTGGCCACAATAAC
 TTCGAGCTCTTCCCTGAGCAGAAAGACCCTCTCTGGCAGAATCCATGCGACGATAAACGACACAAGACA
 TCTGGTCCAGGGAGAAAACCTGTGACCATTTACCGAAATTCCTTGTGATTGGGCCACAGAAGACAGGAAC
 AACTGCACCTTTATTTATTTCTTCTAATGCACCCCTCCATCATCAGCAATCTTCTAGCCCCAAAACCTTT
 GAAGAAGTTCAATTTTTAATGGCAACAACATCAACAAGGGAATTGAGTGGTATATGGACTTTTTCCCCA
 CTCCTTCCAACATTACCAGTGAATTTCTATTTGAAAAGAGTGCTAACTACTTCCACTCAGAAGAGGCTCC
 CAAGAGGGCTGCATCTCTGTTCCCAAAGCCAAGATCATTACTATCCTCATAGACCCCTCGGACAGGGCA
 TATTCTTGGTACCAGCACCAACGATCTCATGAAGATCCAGCTGCCCTGAGGTTCAATTTCTATGAAGTTA
 TCACAACAGGACATTGGGCCCTCTGATTTAAAAACATTGCAGAGGAGATGTCTGGTGCCTGGGTGGTA
 TGCAGTGCACATAGAAAGATGGCTGGCCTACTTTTCTACTTCCCAGTTGCTAATTATTGATGGACAACAG
 CTGAGATCTGACCCAGCTACTGTGATGGATGAAGTCCAGAAGTTTCTAGGAGTTACACCTCATTATAATT
 ACTCGGAAGCACTAACGTTTGTATCCCCAGAAAGGCTTTTGGTGTGAGCTACTAGAAGGAGAAAAACCAA
 ATGCCCTTGGGAAAAGCAAAGGCCGAAAATACCCGCCCATGGATTGAGTCCAGAACTTTCTCTCCAGC
 TACTACCGGACCAACGTTGAACTCTCGAAGCTGCTGCACAGGCTGGGGCAGCCTCTGCCCTCGTGGC
 TGAGACAGGAGCTGCAGAAAGTGAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218546 representing NM_022565
 Red=Cloning site Green=Tags(s)

MNLILKFRRSFRTLIVLLATFCLVLSILISAYFLYSGYKQEMTLIETTAEAEACADIKDLPYRSIELRTIKP
 IDTSKTDPTVLLFVESQYSQLGQDIIAILESSRFQYQMVIAPGKGDIPPLTDSGKGYTLIIYENILKYV
 SMDSWNRELLEKYCIEYSVSIIGFHKANENSLPTTQLKGFPLNLFNNVALKDCSVNPQSPLLHITKGPKV
 EKGPLGEDWTIFQYNHSTYQPVLLTELQSEKLSFLSSQTLATIIQDLGLHDGIQRVLFGNLNFWLH
 KLIFIDAI SFLSGKRLTSLDRYILVDIDDIFVGKEGTRMNVKDVKALLEQTQNLRTQVANFTFNLGFSG
 KFYHTGTEEEDEGDLLLRVDFWFWPHMWSHMOPHLFHNESSLVEQMILNKEFALEHGIPINLGYAVA
 PHHSGVYPVHIQLYA AWK V WGIQVTSTEEYPHLKPARYRKGFIHNSIMVLPRTQCGLFTHTFYKEYPG
 GPQELDKSIKGGELFLTILLNPISIFMTHLSNYGNDRLGLYTFVNLANFVHSWTLKQLTPPVQLAHKY
 FELFPEQKDPLWQNPCDDKRHKDIWSREKTCDHLPKFLVIGPQKTGTALYLFLLMHPSIISNLSPKTF
 EEVQFFNGNHYHKGIEWYMDFFPTPSNITSDFLFEKSANYFHSEEAPKRAASLVPKAKIITILIDPSDRA
 YSWYQHQRSHEDPAALRFNFYEVIITGGWAPPDLKTLQRRCLVPGWYAVHIERWLAYFSTSLLIIDGQQ
 LRSDPATVMDEVQKFLGVTPHYNYSEALTFDPQKGFWCQLLEGGKTKCLGKSKGRKYPMDSESRFLSS
 YYRDHNVELSKLLHRLGQPLPSWLRQELQKVR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9012_f10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

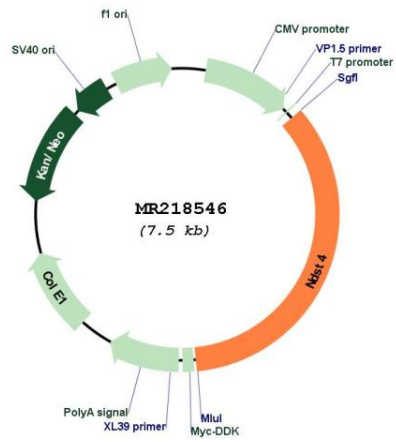
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:	NM_022565
ORF Size:	2616 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:	<ol style="list-style-type: none">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_022565.2 , NP_072087.2
RefSeq Size:	3489 bp
RefSeq ORF:	2619 bp
Locus ID:	64580
UniProt ID:	Q9EQW8
Cytogenetics:	3 G1
MW:	101.1 kDa
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. Has low deacetylase activity but high sulfotransferase activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218546