

Product datasheet for **RC211521**

NDST4 (NM_022569) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDST4 (NM_022569) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NDST4
Synonyms:	N-HSST; N-HSST 4; NDST-4; NHSST4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC211521 representing NM_022569
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATCTTATTGTGAACTTCGGAGAAGTTTTCGAACATTGATTGTTCTCTTAGCTACCTTTTGCTTGG
TGAGCATTGTCATTTCTGCCTATTTTCTCTACTCTGGCTACAAACAGGAAATGACTTATTGAAACCAC
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TGAGACAGGAACTGCAGAAAGTGAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211521 representing NM_022569
 Red=Cloning site Green=Tags(s)

MNLIVKLRRSFRTLIVLLATFCLVSIIVISAYFLYSGYKQEMTLIETTAEAECTDIKILPYRSMELKTVKP
 IDTSKTDPTVLLFVESQYSQLGQDIIAILESSRFQYHMVIAPGKGDIPPLTDNGKGYTLVIYENILKYV
 SMDSWNRELLEKYCVEYSVSIIGFHKANENSLPSTQLKGFPLNLFNNLALKDCFVNPQSPLLHITKAPKV
 EKGPLGEDWTFIQYNHSTYQPVLLTELQTEKLSLSSKTLFATVIQDLGLHDGIQRVLFGNLNFWLH
 KLIFIDAI SFLSGKRLTSLDRYILVDIDDIFVGKEGTRMNVKDVKALLEQTQNLRTQVANFTFNLGFSG
 KFYHTGTEEEDEGDDLRLRSVDEFWFWPHMWSHMOPHLFHNESSLVEQMILNKEFALEHGIPINMGYAVA
 PHHSGVYPVHIQLYA AWK V WGIQVTSTEEYPHLKPARYRKGFIHNSIMVLPRTQCGLFTHTFYKEYPG
 GPQELDKSIRGGELFLTILLNPISIFMTHLSNYGNDRLGLYTFVNLVNFVQSWTNLKLQTLPPVQLAHQY
 FELFPEQKDPLWQNPCDDKRHKDIWSREKTCDHLPKFLVIGPQKTGTALYLFLLMHPSIISNLPSPKTF
 EEVQFFNGNHYHKGIDWYMDFFPTPSNTTSDFLFEKSANYFHSEEAPRAASLVPKAKIITILIDPSDRA
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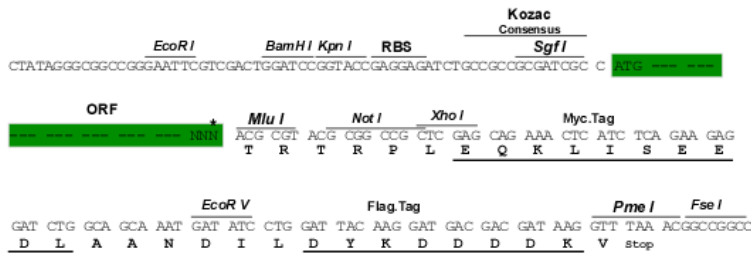
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8010_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

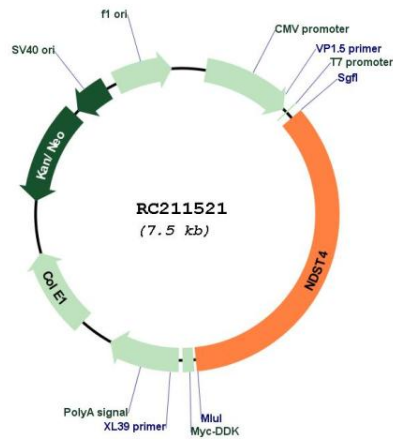
Cloning sites used for ORF Shuttling:



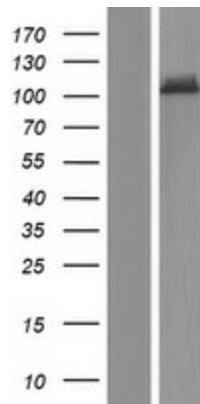
* The last codon before the Stop codon of the ORF

ACCN:	NM_022569
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_022569.3
RefSeq Size:	3359 bp
RefSeq ORF:	2619 bp
Locus ID:	64579
UniProt ID:	Q9H3R1
Cytogenetics:	4q26
Protein Families:	Transmembrane
Protein Pathways:	Heparan sulfate biosynthesis, Metabolic pathways
MW:	100.5 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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC211521



Western blot validation of overexpression lysate (Cat# [LY411635]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211521 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).