

Product datasheet for **RC208907**

DIS3 (NM_014953) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DIS3 (NM_014953) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DIS3
Synonyms:	2810028N01Rik; dis3p; EXOSC11; KIAA1008; RRP44
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208907 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCAAGTCCAAGACGTTCTTAAAAAGACCCGGGCGGGCGGCGTGATGAAGATCGTGCGCAGCACT
 ACCTGCGAGACGACATCGGCTGCGGTGCGCCCGGTGCGCAGCGTGTGGAGGGGCGCACGAGGGGCCGGC
 CCTGGAGCCGACGCCAGGACCCGCGCAGCAGCGTCTGCCCGCAACCGCACTACTTGTGCCGCACT
 AATGTGTTACTGCACCAGATTGATGTTCTTGAGGACCCTGCCATCAGGAATGTAATTGTGCTACAAACAG
 TTCTTCAAGAAGTGAAGAAATCGCAGTGCCCGGTATATAAACGCATCCGAGATGTGACTAATAACCAAGA
 GAAGCATTCTATACTTTCACTAATGAGCACCATAGAGAAACCTATGTAGAACAAGAACAGGGAGAAAAAT
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 TGATGATGAGATACCCTCACTTAAAATAGAAGATACAGTGTCCATGATTTGATAAAGTTAAAGTGAAA
 ATCATGTTAGACTCATCTAATCTTCAACATCAGAAGATCCGAATGTCCTGGTAGAACACAGATACCAG
 GAATAAGCATTCTACTGATACTTCAAACATGGACCTTAAATGGACCAAGAAAAAGAAGTGAAGCTTGG
 AAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208907 protein sequence
 Red=Cloning site Green=Tags(s)

MLKSKTFLKKTRAGGVMKIVREHYLRDDIGCGAPGCAACGGAHEGPALEPQPDPASSVCPQPHYLLPDT
 NVLLHQIDVLEDPAIRNVIQLQTVLQEVNRNSAPVYKRI RDVTNNQEKHFYTFNEHHRETYVEQEEN
 ANDRNDRAIRVAAKWYNEHLKMSADNLQVIFITNDRRNKEKAIIEGIPAFTCCEEYVKS LTANPELIDR
 LACLSEEGNEIESGKIIFSEHLPLSKLQQGIKSGTYLQGTFRASRENYLEATVWIHGDNEENKEIILQGL
 KHLNRAVHEDIVAVELLPKSQWVAPSSVVLHDEGQNEEDVEKEEERERMLKTAVSEKMLKPTGRVVGIIK
 RNWRPYCGMLSKSDIKESRRHLFTPADKRIPRIEITRQASTLEGRRIIVAIDGWPRNSRYPNGHFVRNL
 GDVGEKETETEVLLLEHDVPHQPFSAVL SFLPKMPWSITEKDMKNREDLRHLCSVDPPGCTDIDDAL
 HCRELENGNLEVGVIADVSHFIRPGNALDQESARRGTTVYLCEKRIDMVPELLSSNLCSLKCVDRLAF
 SCIWEMNHNAEILKTKFTKSVINSKASLTYAEAQLRIDSANMDDITTSRLGNLAKILKKRIEK GAL
 TLSSPEVRFHMDSETHDPIDLQTKELRETNSMVVEEFMLLANISVAKKIHEEFSEHALLRKHPAPPPS NYE
 ILVKAARSRLNIKTDTAKSLAESLDQAESPTFPYLNTLLRILATRCMMQAVYFCSGMDNDFHHYGLASP
 IYTHFTSPIRRYADVIVHRLLAVAIGADCTYPELTDKHKLADICKNLNFRHKMAQYAQRASVAFHTQLFF
 KSKGIVSEEA YILFVRKNAIVVLI PKYGLEGTVFEEKDKPNPQLIYDDEIPSLKIEDTVFHVFDKVKVK
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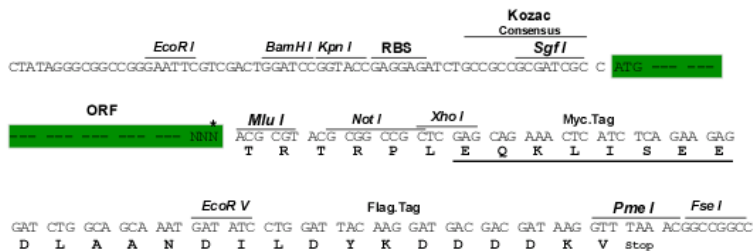
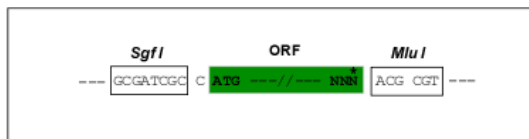
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6230_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

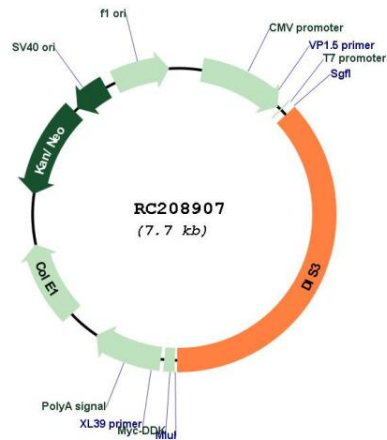
ACCN: NM_014953

ORF Size: 2874 bp

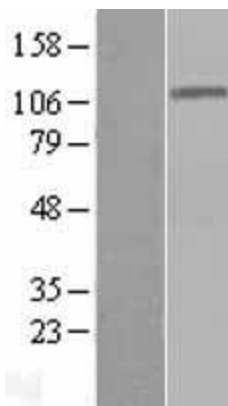
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_014953.5
RefSeq Size:	7589 bp
RefSeq ORF:	2877 bp
Locus ID:	22894
UniProt ID:	Q9Y2L1
Cytogenetics:	13q21.33
Domains:	RNB, PINc
Protein Pathways:	RNA degradation
MW:	109.1 kDa

Gene Summary:

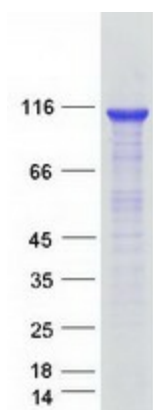
Putative catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, in the elimination of RNA processing by-products and non-coding 'pervasive' transcripts, such as antisense RNA species and promoter-upstream transcripts (PROMPTs), and of mRNAs with processing defects, thereby limiting or excluding their export to the cytoplasm. The RNA exosome may be involved in Ig class switch recombination (CSR) and/or Ig variable region somatic hypermutation (SHM) by targeting AICDA deamination activity to transcribed dsDNA substrates. In the cytoplasm, the RNA exosome complex is involved in general mRNA turnover and specifically degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3' untranslated regions, and in RNA surveillance pathways, preventing translation of aberrant mRNAs. It seems to be involved in degradation of histone mRNA. DIS3 has both 3'-5' exonuclease and endonuclease activities.[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for RC208907



Western blot validation of overexpression lysate (Cat# [LY414919]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208907 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DIS3 protein (Cat# [TP308907]). The protein was produced from HEK293T cells transfected with DIS3 cDNA clone (Cat# RC208907) using MegaTran 2.0 (Cat# [TT210002]).