

Product datasheet for **MR218540**

Dis3 (NM_028315) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dis3 (NM_028315) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dis3
Synonyms:	2810028N01Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR218540 representing NM_028315
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTCAGGTCCAAGACGTTCTTGAAGAAGACCCGCGCGGGCGGCGTGGTGAAGATCGTGCGGAGCACT
 ACCTGCGGGATGACATCGGCTGCGGCGCCGGCTTGCTCGGCCTGCGGGGGCGCACGCGGGCCCGGC
 CCTGGAGCTGCAGCCCCGGGACAGCGAGCAGCCTCTGCCCGTGCCGCACTACCTTCTGCCGGACACC
 AATGTGCTGCTGCACCAGATTGATGTCCTCGAACACCCGGCCATCAGAAATGTCATTGTGCTACAAACAG
 TGATGCAAGAAGTGAGAAACCGAGCGCCCCATCTACAAGCGAATCAGGGATGTGACCAATAACCAGGA
 AAAGCATTCTATACCTCACTAATGAGCACCATAAAGAACTACATCGAGCAAGAGCAGGGAGAGAAT
 GCCAATGACAGGAATGACAGAGCCATCCGAGTCGACGGAAGTGTACAACGAGCACCTGAAGAGGGTGG
 CAGCAGACAGTCAGTCAAGTTATCCTGATAACCAATGACAGGAAGAACAAGAGAAAGCTGTGAAGA
 GGGGATACCAGCCTTACGTGTGAAGAATACGTAAAGAGCCTGACTGCTAACCTGAACTTATAGACCGT
 CTTGCTTACTTGTCCGATGAAATGAATGAAATAGAAAAGTGGGAAAATAATATTTTCAGAGCATCTCCCT
 TAAGCAAGCTCCAACAAGGCATAAAATCTGGTTCTATCTTCAAGGAACATTCAGAGCTAGCAGGGAAAA
 TTTTTGGAGGCTACAGTATGGATTCATGGAGACAAAAGAGGAAAAAGAGATACTTATACAGGGAATT
 AAGCATCTAAACAGAGCTGTGCATGAAGACATTGTGGCCGTGGAGCTACTGCCAGGAGCCAGTGGGTGG
 CACCGTCTTCCGTGGTTTTAGACGATGAAGTCAAATGAAGACGATGTGGAGAAAGATGAGGAGAGAGA
 ACTCCTGCTTAAGACTGCTGTAAGTAAAAAATGTTACGGCTACAGGTCGAGTTGTGGGATAATAAAA
 AGGAAGCTGAGACCGTATTGTGGCATGCTTCCAAAGTCTGATATTAAGGAGTCAAGAAGACATCTTTTA
 CACCCGCTGATAAGAGAATCCACGAATTCGGATAGAAACAGACAGGCTTCTGCGTTAGAAGCAGGGA
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 GGCGATGTTGGAGAGAAGGAGACAGAAACGGAAGTGTGCTGCTCGAGCACGATGTTCTCATCAGCCCT
 TTTCCAGGCTGTGCTTAGCTTCTGCCAGGATGCCCTGGAGCATTACTGAGGAGGACATGAAAAACCG
 AGAAGACCTGAGACATCTGTGTGTTGACGTGTGGACCTCCAGGGTGCCTGACATAGATGACGCTCTG
 CATTGTAGAGAGCTCAGCAATGGAACTTGAGGTTGGTGTTCATATTGCGGATGTTAGCCATTTTATCA
 GGCCAGGAAATGCGTTGGATCAAGAATCTGCAAGAAGAGGAACAACCTGTTTATCTTTGTGAAAAGAGGAT
 TGACATGGTCCAGAGTGTCTCAGCTCCAACCTCTGTTCTTAAGATCCAACGTTGACAGGTTGGCATT
 TCCTGTATTTGGGAAATGAATCATAATGCTGAAATATTAACAAACGAGATTTACAAAAGTGCATTAATT
 CAAAGGCTTCTCTTACGTACGCGGAAGCACAGATGAGAATTGATTCGGCGGCTATGAATGATGATATTAC
 CACTAGTCTCCGTGGACTCAATCAGCTGGCTAAAATCTAAAAAGGGAAGGATTGAAAAGGGGGCTTTG
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 AAGAGCTGAGAGAAACAAATCCATGGTGAAGAATTTATGTTACTTGCTAATATTTCTGTGCAAAAAA
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 GAATAAATATTCTCCTAATGTTGCAGACAAGGCTTACTGCACCAGGGGGAAGAAGAGGAAGCTTGA
 GAAG

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218540 representing NM_028315
 Red=Cloning site Green=Tags(s)

MLRSKTFLLKTRAGGVVIVREHYLRDDIGCGAPACACGGAHAGPALELQPRDQASSLCPWPHYLLPDT
 NVLLHQIDVLEHPAIRNVIVLQTVMQEVRNRSAPIYKRIRDVTNNQEKHFYTFNEHHKETYIEQEQGEN
 ANDRNDRAIRVAAKWYNEHLKRVAADSQLQVILITNDRKNKEKAVQEGIPAFTECEYVKSLSLTANPELIDR
 LAYLSDMEMNIEESGKIIFSEHLPLSKLQQGIKSGSYLQGTFRASRENYLEATVWIHGDKKEEKEILIQGI
 KHLNRAVHEDIVAVELLPRSQWVAPSSVVLDDGQNEDDVEKDEERELLKTAVSEKMLRPTGRVVGIIK
 RNWRPYCGMLSKSDIKESRRHLFTPADKRIPIRIETRQASALEGRRIIVAIIDGWPRNSRYPNGHFVKNL
 GDVGEKETETEVLLLEHDVPHQPFSAVLSFLPRMPWSITEEDMKNREDLRHLCVCSVDPPGCTDIDDAL
 HCRELSNGNLEVGVIADVSHFIRPGNALDQESARRGTTVYLCEKRIDMVPELLSSNLCSLSRNVDRDLAF
 SCIWEMNHNAEILKTRFTKSVINSKASLYAEAQMRIDSAMNDDITTSRLRNLQAKILKKGRIEKAL
 TLSSPEIRFHMDSETHDPIDLQTKELRETNMVEEFMLLANISVAKKIHEEFSEHALLRKHPAPPPSNYD
 ILVKAASKNLQIKTDTAKSLADSLDRAESDPFPYLNTLLRILATRCMMQAVYFCSGMDNDFHHYGLASP
 IYTHFTSPIRRYADIIVHRLLAIVAIGADCTYPELTDKHKLSICKNLNFRHKMAQYAQRASVAFHTQLFF
 KSKGIVSEEAYILFVRKNAIVVLIIPKYGLEGTVFEEKDKPKRLAYDDEIPSLRIEGTVFHVFDKVKVK
 ITLDSSNLQHQKIRMALVEPQIPGINIPNVADKALTAPGGKKRKLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_028315

ORF Size: 2874 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_028315.2](#), [NP_082591.2](#)

RefSeq Size: 3722 bp

RefSeq ORF: 2877 bp

Locus ID: 72662

UniProt ID: [Q9CSH3](#)

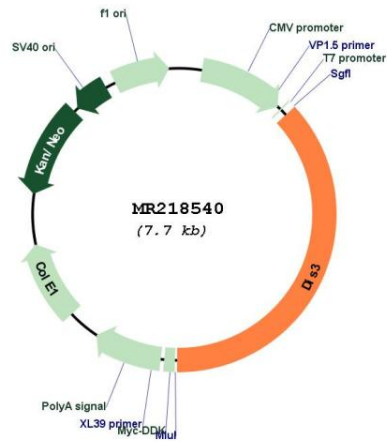
Cytogenetics: 14 E2.2

MW: 109.3 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 MR218540