

## Product datasheet for **MG218540**

### Dis3 (NM\_028315) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dis3 (NM_028315) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dis3
Synonyms:	2810028N01Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG218540 representing NM\_028315  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCTCAGGTCCAAGACGTTCTTGAAGAAGACCCGCGCGGGCGGCGTGGTGAAGATCGTGCAGCACT  
 ACCTGCGGGATGACATCGGCTGCGGCGCCGGCTTCTCGGCCTGCGGGGGGCGCACGCGGGCCCGGC  
 CCTGGAGCTGCAGCCCCGGGACAGCGAGCAGCCTCTGCCCGTGGCCGCACTACCTTCTGCCGGACACC  
 AATGTGCTGCTGCACCAGATTGATGTCCTCGAACACCCGGCCATCAGAAATGTCATTGTGCTACAAACAG  
 TGATGCAAGAAGTGAGAAACCGGAGCGCCCCATCTACAAGCGAATCAGGGATGTGACCAATAACCAGGA  
 AAAGCATTCTATACCTCACTAATGAGCACCATAAAGAAACCTACATCGAGCAAGAGCAGGGAGAGAAT  
 GCCAATGACAGGAATGACAGAGCCATCCGAGTCGACGGAAGTGTACAACGAGCACCTGAAGAGGGTGG  
 CAGCAGACAGTCAGTCAAGTTATCCTGATAACCAATGACAGGAAGAACAAGAGAAAGCTGTGAAGA  
 GGGGATACCAGCCTTACGTGTGAAGAATACGTAAGAGCCTGACTGCTAACCTGAACTTATAGACCGT  
 CTTGCTTACTTGTCCGATGAAATGAATGAAATAGAAAAGTGGGAAAATAATATTTTCAGAGCATCTCCCT  
 TAAGCAAGCTCCAACAAGGCATAAAATCTGGTTCTATCTTCAAGGAACATTCAGAGCTAGCAGGGAAAA  
 TTTTTGGAGGCTACAGTATGGATTCATGGAGACAAAAGAGGAAAAAGAGATACTTATACAGGGAAAT  
 AAGCATCTAACAGAGCTGTGCATGAAGACATTGTGGCCGTGGAGCTACTGCCAGGAGCCAGTGGGTGG  
 CACCGTCTTCCGTGGTTTTAGACGATGAAGGTCAAATGAAGACGATGTGGAGAAAGATGAGGAGAGAGA  
 ACTCCTGCTTAAGACTGCTGTAAGTGAAGAAATGTTACGGCTACAGGTCGAGTTGTGGGATAATAAAA  
 AGGAACGGAGACCGTATTGTGGCATGCTTCCAAAGTCTGATATTAAGGAGTCAAGAAGACATCTCTTTA  
 CACCCGCTGATAAGAGAATTCCACGAATTCGGATAGAAACAGACAGGCTTCTGCGTTAGAAGCAGGGA  
 AATTATTGTCGCTATTGATGGTTGGCCTAGAAATTCAGATATCCAATGGACACTTTGTAAAGAATTTA  
 GGCGATGTTGGAGAGAAGGAGACAGAAACGGAAGTGTGCTGCTCGAGCACGATGTTCTCATCAGCCCT  
 TTTCCAGGCTGTGCTTAGCTTCTGCCAGGATGCCCTGGAGCATTACTGAGGAGGACATGAAAAACCG  
 AGAAGACCTGAGACATCTGTGTGTTGTCAGTGTGGACCTCCAGGGTGCCTGACATAGATGACGCTCTG  
 CATTGTAGAGAGCTCAGCAATGGAACTTGGAGGTTGGTGTTCATATTGCGGATGTTAGCCATTTTATCA  
 GGCCAGGAAATGCGTTGGATCAAGAATCTGCAAGAAGAGGAACAACCTGTTTATCTTTGTGAAAAGAGGAT  
 TGACATGGTCCAGAGTGTCTCAGCTCCAACCTCTGTTCTTAAGATCCAACGTTGACAGGTTGGCATT  
 TCCTGTATTTGGGAAATGAATCATAATGCTGAAATATTAACCAAGGATTTACCAAAAGTGCATTAATT  
 CAAAGGCTTCTCTTACGTACGCGGAAGCACAGATGAGAATTGATTCGGCGGCTATGAATGATGATATTAC  
 CACTAGTCTCCGTGGACTCAATCAGCTGGCTAAAATCTAAAAAGGGAAGGATTGAAAAGGGGGCTTTG  
 ACTCTGTCTTCTCCAGAGATCCGATTCCACATGGACAGTGAACCCACGACCCAATCGACCTGCAGACGA  
 AAGAGCTGAGAGAAACAAATCCATGGTGAAGAATTTATGTTACTTGCTAATATTTCTGTGCAAAAAA  
 AATTCATGAAGAGTTTTCTGAACATGCTGCTCGGAAACACCCAGCTCCGCTCCCTCGAATTATGAC  
 ATCTTGTAAAGGCTGCAAAGTCCAAGAATTTGCAAATTAAGACTGATACAGCCAATCTTTGGCCGACT  
 CTTTGGACCGGCTGAATCTCCGATTTCCCATACCTGAATACTATTAAGGATACTGGCACTCGCTG  
 TATGATGCAAGCTGTGACTTCTGCTCTGGGATGGATAATGATTTTCATCACTATGGCTTAGCCTCCCC  
 ATATACACACATTTACCTCTCCTATCAGAAGATATGCAGACATAATTGTCCATCGGCTATTAGCTGTGG  
 CGATTGGGCTGACTGTACTTACCCTGAGTTGACAGACAAAACACAAGCTTTCAGATATATGTAACAACT  
 CAATTTCCGGCATAAAATGGCTCAGTATGCCAGCGTGTCTCGGTGGCTTTTCATACACAGTTGTTTTTC  
 AAAAGCAAAGGAATAGTAAGTGAAGAAGCCTATATTCTTTGTAAGGAAAAATGCAATTGTGGTGTAA  
 TTCCAAAGTATGGCTTAGAAGGTACAGTTTTCTTTGAAGAAAAAGATAAACCAAAGCCACGCTTGTCTTA  
 CGATGATGAGATCCCTCCCTGAGAATAGAAGGTACAGTGTCCATGTGTTTGATAAGGTTAAAGTGAAG  
 ATCACATTAGATTCATAAATCTCAACATCAGAAAATCCGCATGGCCCTGTAGAACCACAGATCCCGAG  
 GAATAAATATTCTCCTAATGTTGCAGACAAGGCTCTTACTGCACCAGGGGAAAGAAGAGGAAGCTTGA  
 GAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG218540 representing NM\_028315  
 Red=Cloning site Green=Tags(s)

MLRSKTFLLKTRAGGVVIVREHYLRDDIGCGAPACSACGGAHAGPALELQPRDQASSLCPWPHYLLPDT  
 NVLLHQIDVLEHPAIRNVIVLQTVMQEVRNRSAPIYKRIRDVTNNQEKHFYFTTNEHHKETYIEQEQGEN  
 ANDRNDRAIRVAAKWYNEHLKRVAADSQLQVILITNDRKNKEKAVQEGIPAFTCCEEYVKSILTANPELIDR  
 LAYLSDMEMNEIESGKIIFSEHLPLSKLQQGIKSGSYLQGTFRASRENYLEATVWIHGDKKEEKEILIQGI  
 KHLNRAVHEDIVAVELLPRSQWVAPSSVVLDDGQNEDDVEKDEERELLKKTAVSEKMLRPTGRVVGIIK  
 RNWRPYCGMLSKSDIKESRRHLFTPADKRIPIRIETRQASALEGRRIIVAIDGWPRNSRYPNGHFVKNL  
 GDVGEKETETEVLLLEHDVPHQPFSQAVLSFLPRMPWSITEEDMKNREDLRHLCVCSVDPPGCTDIDDAL  
 HCRELSNGNLEVGVIADVSHFIRPGNALDQESARRGTTVYLCEKRIDMVPELLSSNLCSLRSNVDRLAF  
 SCIWEMNHNAEILKTRFTKSVINSKASLYAEAQMRIDSAMNDDITTSLRGLNQLAKILKKGRIEKGAL  
 TLSSPEIRFHMDSETHDPIDLQTKELRETNSMVEEFMLLANISVAKKIHEEFSEHALLRKHPAPPPSNYD  
 ILVKAASKNLQIKTDTAKSLADSLDRAESDPFPYLNTLLRILATRCMMQAVYFCSGMDNDFHHYGLASP  
 IYTHFTSPIRRYADIIVHRLLAIVAIGADCTYPELTDKHKLSICKNLNFRHKMAQYAQRASVAFHTQLFF  
 KSKGIVSEEAYILFVRKNAIVVLIIPKYGLEGTVFEEKDKPKRLAYDDEIPSLRIEGTVFHVFDKVKVK  
 ITLDSSNLQHQKIRMALVEPQIPGINIPPNVADKALTAPGGKKRKLK

TRTRPLE - GFP Tag - V

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](mailto: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

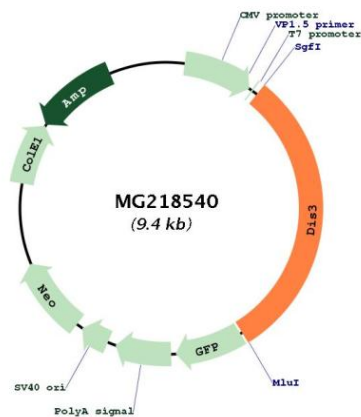
**Locus ID:** 72662

**UniProt ID:** [Q9CSH3](#)

**Cytogenetics:** 14 E2.2

**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 MG218540