

Product datasheet for **SC114689**

DIS3 (NM_014953) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DIS3 (NM_014953) Human Untagged Clone
Tag:	Tag Free
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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Fully Sequenced ORF: >NCBI ORF sequence for NM_014953, the custom clone sequence may differ by one or more nucleotides

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ATGCTCAAGTCCAAGACGTTCTTAAAAAGACCCGGGCGGGCGGCGTGATGAAGATCGTGCGGAGCACT
ACCTGCGAGACGACATCGGCTGCGGTGCGCCCGGTGCGCAGCGTGTGGAGGGGCGCAGAGGGGCCGGC
CCTGGAGCCGACGCCCCAGGACCCGGCGAGCAGCGTCTGCCCGCAACCGCACTACTTGTGCCGACACT
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TTCTTCAAGAAGTGAGAAATCGCAGTGCCCCGTATATAAACGCATCCGAGATGTGACTAATAACCAAGA
GAAGCATTCTATACTTTCACTAATGAGCACCATAGAGAAACCTATGTAGAACAAGAACAGGGAGAAAAAT
GCTAATGACAGGAATGATAGAGCGATTGAGTAGCAGCAAAAATGGTACAATGAACATTTGAAAAAATGT
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TAAGTAAGCTACAGCAAGGCATAAAAATCTGGTACATACCTTCAAGGAACATTTAGAGCTAGCAGGGAAAA
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CACCATCTTGTGGTTTTACATGATGAAGGTCAAATGAAGAAGATGTGGAGAAAGAAGAAGAGACAGA
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CATTGTGCGAGAACTCGAAAATGGAAATTTGGAGGTTGGTGTTCATATTGCTGATGTGAGCCATTTTATTA
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TGACATGGTTCCAGAGTTGCTTAGCTCTAACTTGTGTTCCCTAAAATGTGACGTGGACAGGCTGGCATT
TCATGATTTGGGAAATGAATCACAATGCTGAAATCTTAAAAACGAAGTTTACCAAAAGTGTATTAATT
CAAAGGCATCTGACGTATGCTGAAGCTCAGTTGAGAATTGATTCAGCAACATGAATGATGATATTAC
CACTAGTCTCCGTGGACTGAATAAACTAGCCAAAATCTGAAGAAAAGAAGGATTGAAAAGGGGCTTTG
ACTCTATCCTCTCCTGAAGTTCGATTCCACATGGACAGTGAACCTCACGATCCTATAGATCTGCAGACCA
AGGAACCTAGGGAACAAATCCATGGTTGAAGAATTTATGTTACTTGCCAATATTTCTGTTGCAAAAAA
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ATTCTTGTAAAGGCAGCCAGGTCAAGGAATTTGGAAATTAAGACTGATACAGCCAAGTCTTTGGCTGAGT
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TGATGATGAGATACCCTCACTTAAAATAGAAGATACAGTGTCCATGATTTGATAAAGTTAAAGTGAAA
ATCATGTTAGACTCATCTAATCTTCAACATCAGAAGATCCGAATGTCCCTGGTAGAACACAGATACCAG
GAATAAGCATTCTACTGATACTTCAAACATGGACCTTAAATGGACCAAGAAAAAGAAAGATGAAGCTTGG
AAAATAG
    
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Chromatograms: https://cdn.origene.com/chromatograms/ja1848_e09.zip

Restriction Sites: NotI-NotI

ACCN: NM_014953

Insert Size:	3860 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
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_014953.2 , NP_055768.2
RefSeq Size:	7320 bp
RefSeq ORF:	2877 bp
Locus ID:	22894
UniProt ID:	Q9Y2L1
Cytogenetics:	13q21.33
Domains:	RNB, PINc
Protein Pathways:	RNA degradation

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (a). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.