

Product datasheet for TP308907

OriGene Technologies, Inc.

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DIS3 (NM 014953) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human DIS3 mitotic control homolog (S. cerevisiae) (DIS3), transcript

variant 1, 20 µg

Species: Human **Expression Host:** HEK293T

Expression cDNA Clone >RC208907 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

> MLKSKTFLKKTRAGGVMKIVREHYLRDDIGCGAPGCAACGGAHEGPALEPQPQDPASSVCPQPHYLLPDT NVLLHQIDVLEDPAIRNVIVLQTVLQEVRNRSAPVYKRIRDVTNNQEKHFYTFTNEHHRETYVEQEQGEN ANDRNDRAIRVAAKWYNEHLKKMSADNQLQVIFITNDRRNKEKAIEEGIPAFTCEEYVKSLTANPELIDR LACLSEEGNEIESGKIIFSEHLPLSKLQQGIKSGTYLQGTFRASRENYLEATVWIHGDNEENKEIILQGL KHLNRAVHEDIVAVELLPKSQWVAPSSVVLHDEGQNEEDVEKEEERERMLKTAVSEKMLKPTGRVVGIIK RNWRPYCGMLSKSDIKESRRHLFTPADKRIPRIRIETRQASTLEGRRIIVAIDGWPRNSRYPNGHFVRNL GDVGEKETETEVLLLEHDVPHQPFSQAVLSFLPKMPWSITEKDMKNREDLRHLCICSVDPPGCTDIDDAL HCRELENGNLEVGVHIADVSHFIRPGNALDQESARRGTTVYLCEKRIDMVPELLSSNLCSLKCDVDRLAF SCIWEMNHNAEILKTKFTKSVINSKASLTYAEAQLRIDSANMNDDITTSLRGLNKLAKILKKRRIEKGAL TLSSPEVRFHMDSETHDPIDLQTKELRETNSMVEEFMLLANISVAKKIHEEFSEHALLRKHPAPPPSNYE ILVKAARSRNLEIKTDTAKSLAESLDQAESPTFPYLNTLLRILATRCMMQAVYFCSGMDNDFHHYGLASP IYTHFTSPIRRYADVIVHRLLAVAIGADCTYPELTDKHKLADICKNLNFRHKMAQYAQRASVAFHTQLFF KSKGIVSEEAYILFVRKNAIVVLIPKYGLEGTVFFEEKDKPNPQLIYDDEIPSLKIEDTVFHVFDKVKVK

IMLDSSNLQHQKIRMSLVEPQIPGISIPTDTSNMDLNGPKKKKMKLGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-Myc/DDK Tag: Predicted MW: 108.8 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol





DIS3 (NM_014953) Human Recombinant Protein - TP308907

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 055768

 Locus ID:
 22894

 UniProt ID:
 Q9Y2L1

 RefSeq Size:
 7589

Cytogenetics: 13q21.33 RefSeq ORF: 2874

Synonyms: 2810028N01Rik; dis3p; EXOSC11; KIAA1008; RRP44

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

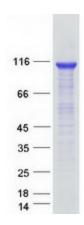
involved in degradation of histone mRNA. DIS3 has both 3'-5' exonuclease and endonuclease

activities.[UniProtKB/Swiss-Prot Function]

Protein Pathways: RNA degradation



Product images:



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]).