

Rabbit Anti-DIS3 antibody

SL7794R

Product Name:	DIS3
Chinese Name:	有丝分裂控制蛋白dis3抗体
Alias:	Dis3; DIS3 mitotic control homolog (S. cerevisiae); dis3p; Exosome complex exonuclease RRP44; Mitotic control protein dis3 homolog; Protein DIS3 homolog; Ribosomal RNA processing protein 44; Ribosomal RNA-processing protein 44; RRP44; RRP44 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications.
Molecular weight:	optimal dilutions/concentrations should be determined by the end user. 105kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DIS3:701-800/958
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Component of the exosome that has both 3'-5' exonuclease and endonuclease activities. Required for the 3'-processing of the 7S pre-RNA to the mature nuclear complex. As part of nucleoplasmic and probably cytoplasmic forms of the RNA exosome complex, it is involved in RNA processing and turnover. Also associated with the GTPase RAN.

Function:

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.

Subunit:

Component of the RNA exosome complex. The catalytically inactive RNA exosome core (Exo-9) complex is believed to associate with catalytic subunits EXOSC10, and DIS3 or DIS3L in cytoplasmic-and nuclear-specific RNA exosome complex forms.

Subcellular Location:

Cytoplasm. Nucleus, nucleolus. Nucleus, nucleoplasm. Nucleus. Note=Predominantly located in the nucleus. According to PubMed:12429849, found in the nucleolus and according to PubMed:20531386, excluded from nucleolus supporting the existence of a nucleolar RNA exosome complex devoid of DIS3.

Tissue Specificity:

Widely expressed.

Similarity:

Belongs to the RNR ribonuclease family. Contains 1 PINc domain.

SWISS:

O9Y2L1

Gene ID:

22894

Database links:

Entrez Gene: 22894Human

Entrez Gene: 72662Mouse

Entrez Gene: 306103Rat

Omim: 607533Human

SwissProt: Q9Y2L1Human

SwissProt: Q9CSH3Mouse

Unigene: 728935Human

Unigene: 744104Human

Unigene: 163339 Mouse

Unigene: 99292Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.