10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DIS3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10196c

Product Information

Application	IHC-P, WB, E
Primary Accession	Q9Y2L1
Other Accession	NP_001121698.1, NP_055768.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24091
Calculated MW	109003
Antigen Region	295-323

Additional Information

Gene ID	22894
Other Names	Exosome complex exonuclease RRP44, 3113-, 3126-, Protein DIS3 homolog, Ribosomal RNA-processing protein 44, DIS3, KIAA1008, RRP44
Target/Specificity	This DIS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 295-323 amino acids from the Central region of human DIS3.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DIS3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DIS3
Synonyms	KIAA1008, RRP44
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.

Cellular Location

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

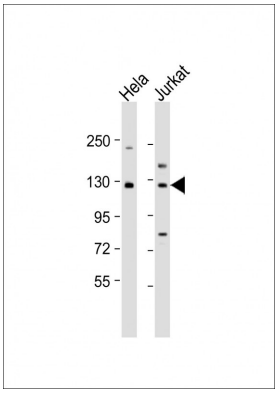
Tissue Location

Widely expressed.

References

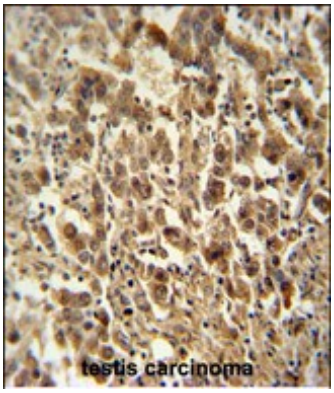
Tomecki, R., et al. EMBO J. 29(14):2342-2357(2010)
Andersen, J.S., et al. Nature 433(7021):77-83(2005)
Lehner, B., et al. Genome Res. 14(7):1315-1323(2004)
Dunham, A., et al. Nature 428(6982):522-528(2004)
Scherl, A., et al. Mol. Biol. Cell 13(11):4100-4109(2002)

Images



All lanes : Anti-DIS3 Antibody (Center) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 109 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

DIS3 antibody (Center) (Cat. #AP10196c) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DIS3 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



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