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EXOSC6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19066a

Product Information

Application	WB, E
Primary Accession	Q5RKV6
Other Accession	NP_478126.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39844
Calculated MW	28235
Antigen Region	12-38

Additional Information

Gene ID	118460
Other Names	Exosome complex component MTR3, Exosome component 6, mRNA transport regulator 3 homolog, hMtr3, p11, EXOSC6, MTR3
Target/Specificity	This EXOSC6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-38 amino acids from the N-terminal region of human EXOSC6.
Dilution	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	EXOSC6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EXOSC6
Synonyms	MTR3
Function	Non-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. The catalytic inactive RNA exosome core complex of 9 subunits (Exo-9) is proposed to play a pivotal role in the binding and presentation of RNA for ribonucleolysis, and to serve as a scaffold for the association with catalytic subunits and accessory proteins or complexes.

Cellular Location Cytoplasm. Nucleus, nucleolus. Nucleus

Background

This gene product constitutes one of the subunits of the multisubunit particle called exosome, which mediates mRNA degradation. The composition of human exosome is similar to its yeast counterpart. This protein is homologous to the yeast Mtr3 protein. Its exact function is not known, however, it has been shown using a cell-free RNA decay system that the exosome is required for rapid degradation of unstable mRNAs containing AU-rich elements (AREs), but not for poly(A) shortening. The exosome does not recognize ARE-containing mRNAs on its own, but requires ARE-binding proteins that could interact with the exosome and recruit it to unstable mRNAs, thereby promoting their rapid degradation.

References

Seth, D., et al. J. Hepatol. 48(4):614-627(2008)
Lehner, B., et al. Genome Res. 14(7):1315-1323(2004)
Raijmakers, R., et al. J. Mol. Biol. 323(4):653-663(2002)
van Hoof, A., et al. Curr. Biol. 12 (8), R285-R287 (2002) :
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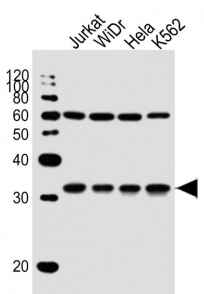
Images



All lanes : Anti-EXOSC6 Antibody (N-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: WiDr whole cell lysate Lane 3: Hela whole cell lysate Lane 4: K562 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 : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.