

EXOSC4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17249c

Specification

EXOSC4 Antibody (Center) - Product Information

Application WB,E
Primary Accession O9NPD3

Other Accession <u>Q92119</u>, <u>Q7YRA3</u>, <u>NP 061910.1</u>

Reactivity Human

Predicted Bovine, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 26383
Antigen Region 69-96

EXOSC4 Antibody (Center) - Additional Information

Gene ID 54512

Other Names

Exosome complex component RRP41, Exosome component 4, Ribosomal RNA-processing protein 41, p12A, EXOSC4, RRP41, SKI6

Target/Specificity

This EXOSC4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 69-96 amino acids from the Central region of human EXOSC4.

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

EXOSC4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EXOSC4 Antibody (Center) - Protein Information

Name EXOSC4



Synonyms RRP41, SKI6

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 Iq 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. EXOSC4 binds to ARE-containing RNAs.

Cellular Location

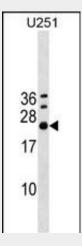
Cytoplasm. Nucleus, nucleolus. Nucleus. Nucleus, nucleoplasm

EXOSC4 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EXOSC4 Antibody (Center) - Images



EXOSC4 Antibody (Center) (Cat. #AP17249c) western blot analysis in U251 cell line lysates (35ug/lane). This demonstrates the EXOSC4 antibody detected the EXOSC4 protein (arrow).



EXOSC4 Antibody (Center) - Background

Component of the exosome 3'->5' exoribonuclease complex, a complex that degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3'-untranslated regions. Required for the 3'-processing of the 7S pre-RNA to the mature 5.8S rRNA. Has a 3'-5' exonuclease activity. Plays a role in replication-dependent histone mRNA degradation.

EXOSC4 Antibody (Center) - References

Mullen, T.E., et al. Genes Dev. 22(1):50-65(2008) van Dijk, E.L., et al. RNA 13(7):1027-1035(2007) Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005) Andersen, J.S., et al. Nature 433(7021):77-83(2005) Lehner, B., et al. Genome Res. 14(7):1315-1323(2004)