

EXOSC1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18442b

Specification

EXOSC1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9Y3B2</u> <u>O9DAA6</u>, <u>NP_057130.1</u> Human Mouse Rabbit Polyclonal Rabbit IgG 21452 165-191

EXOSC1 Antibody (C-term) - Additional Information

Gene ID 51013

Other Names Exosome complex component CSL4, Exosome component 1, EXOSC1, CSL4

Target/Specificity

This EXOSC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 165-191 amino acids from the C-terminal region of human EXOSC1.

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

EXOSC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EXOSC1 Antibody (C-term) - Protein Information

Name EXOSC1



Synonyms CSL4

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. EXOSC1 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC6 and EXOSC8.

Cellular Location Nucleus, nucleolus. Nucleus. Cytoplasm

EXOSC1 Antibody (C-term) - Protocols

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

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

EXOSC1 Antibody (C-term) - Images



EXOSC1 Antibody (C-term) (Cat. #AP18442b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the EXOSC1 Antibody detected the EXOSC1 protein (arrow).



EXOSC1 Antibody (C-term) - Background

This gene encodes a core component of the exosome. The mammalian exosome is required for rapid degradation of AU rich element-containing RNAs but not for poly(A) shortening. The association of this protein with the exosome is mediated by protein-protein interactions with ribosomal RNA-processing protein 42 and ribosomal RNA-processing protein 46.

EXOSC1 Antibody (C-term) - References

Andersen, J.S., et al. Nature 433(7021):77-83(2005) Lehner, B., et al. Genome Res. 14(7):1315-1323(2004) Deloukas, P., et al. Nature 429(6990):375-381(2004) Raijmakers, R., et al. J. Mol. Biol. 323(4):653-663(2002) Raijmakers, R., et al. J. Mol. Biol. 315(4):809-818(2002)