

EXOSC7 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP2855a

Specification

EXOSC7 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession <u>Q15024</u>

EXOSC7 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 23016

Other Names

Exosome complex component RRP42, Exosome component 7, Ribosomal RNA-processing protein 42, p8, EXOSC7, KIAA0116, RRP42

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP2855a was selected from the N-term region of human EXOSC7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

EXOSC7 Antibody (N-term) Blocking Peptide - Protein Information

Name EXOSC7

Synonyms KIAA0116, RRP42

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

Nucleus, nucleolus. Cytoplasm. Nucleus

EXOSC7 Antibody (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides

EXOSC7 Antibody (N-term) Blocking Peptide - Images

EXOSC7 Antibody (N-term) Blocking Peptide - Background

EXOSC7 is a 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. The protein is required for the 3'-processing of the 7S pre-RNA to the mature 5.8S rRNA and has a 3'-5' exonuclease activity.

EXOSC7 Antibody (N-term) Blocking Peptide - References

The MGC Project Team Genome Res. 14:2121-2127(2004)Nagase T., Miyajima N., Tanaka A., Sazuka T., Seki N.DNA Res. 2:37-43(1995)Chen C.-Y., Gherzi R., Ong S.-E., Chan E.L., Raijmakers R.Cell 107:451-464(2001)