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EXOSC1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP18442b

Specification

EXOSC1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9Y3B2

EXOSC1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 51013

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

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.

EXOSC1 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

EXOSC1 Antibody (C-term) Blocking Peptide - Images

EXOSC1 Antibody (C-term) Blocking Peptide - Background

This gene encodes a core component of the exosome. Themammalian exosome is required for rapid degradation of AU richelement-containing RNAs but not for poly(A) shortening. Theassociation of this protein with the exosome is mediated byprotein-protein interactions with ribosomal RNA-processing protein42 and ribosomal RNA-processing protein 46.

EXOSC1 Antibody (C-term) Blocking Peptide - 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)