

EXOSC1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP18442b**Specification**

EXOSC1 Antibody (C-term) Blocking Peptide - Product InformationPrimary 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. 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) 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) Rajmakers, R., et al. J. Mol. Biol. 323(4):653-663(2002) Rajmakers, R., et al. J. Mol. Biol. 315(4):809-818(2002)