

EXOSC2 Blocking Peptide(N-term)
Synthetic peptide
Catalog # BP20534a**Specification**

EXOSC2 Blocking Peptide(N-term) - Product InformationPrimary Accession [Q13868](#)**EXOSC2 Blocking Peptide(N-term) - Additional Information**

Gene ID 23404

Other Names

Exosome complex component RRP4, Exosome component 2, Ribosomal RNA-processing protein 4, EXOSC2, RRP4

Target/Specificity

The synthetic peptide sequence is selected from aa 11-25 of Human EXOSC2

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.

EXOSC2 Blocking Peptide(N-term) - Protein InformationName EXOSC2 ([HGNC:17097](#))**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. EXOSC2 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC4 and EXOSC7.

Cellular Location

Cytoplasm. Nucleus, nucleolus. Nucleus.

EXOSC2 Blocking Peptide(N-term) - Protocols

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

- [Blocking Peptides](#)

EXOSC2 Blocking Peptide(N-term) - Images

EXOSC2 Blocking Peptide(N-term) - Background

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EXOSC2 Blocking Peptide(N-term) - References

Chisoe S.L., et al. Thesis (1994), University of Oklahoma, United States.
Mitchell P., et al. Cell 91:457-466(1997).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Humphray S.J., et al. Nature 429:369-374(2004).
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.