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EXOSC3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2781b

Specification

EXOSC3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9NQT5

EXOSC3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 51010

Other Names
Exosome complex component RRP40, Exosome component 3, Ribosomal RNA-processing protein 40, p10, EXOSC3, RRP40

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2781b was selected from the C-term region of human EXOSC3. 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.

EXOSC3 Antibody (C-term) Blocking Peptide - Protein Information

Name EXOSC3

Synonyms RRP40

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. EXOSC3 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC9 and EXOSC5.

Cellular Location
Cytoplasm. Nucleus, nucleolus. Nucleus

EXOSC3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

EXOSC3 Antibody (C-term) Blocking Peptide - Images

EXOSC3 Antibody (C-term) Blocking Peptide - Background

EXOSC3 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. It is required for the 3'processing of the 7S pre-RNA to the mature 5.8S rRNA. It has a 3'-5' exonuclease activity.

EXOSC3 Antibody (C-term) Blocking Peptide - References

Raijmakers,R., J. Mol. Biol. 323 (4), 653-663 (2002)Brouwer,R., Arthritis Res. 4 (2), 134-138 (2002)Brouwer,R., J. Biol. Chem. 276 (9), 6177-6184 (2001)