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EXOSC4 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55667

Specification

EXOSC4 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q9NPD3
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**26 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human EXOSC4**
Epitope Specificity	**51-150/245**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm. Nucleus, nucleolus.**
SIMILARITY	**Belongs to the RNase PH family.**
SUBUNIT	**Component of the RNA exosome complex. Specifically part of the catalytically inactive RNA exosome core (Exo-9) complex which is believed to associate with catalytic subunits EXOSC10, and DIS3 or DIS3L in cytoplasmic- and nuclear-specific RNA exosome complex forms. Exo-9 is formed by a hexameric ring of RNase PH domain-containing subunits specifically containing the heterodimers EXOSC4-EXOSC9, EXOSC5-EXOSC8 and EXOSC6-EXOSC7, and peripheral S1 domain-containing components EXOSC1, EXOSC2 and EXOSC3 located on the top of the ring structure. Interacts with DDX60.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
The exosome is a multisubunit complex composed of several highly conserved subunits, some of which are 3’ to 5’ exoribonucleases. The complex is involved in a variety of cellular processes and is responsible for degrading unstable mRNAs that contain AU-rich (ARE) elements in their untranslated 3’ region. EXOSC4 (exosome component 4), also known as SKI6, RRP41 or p12A, is a 245 amino acid protein that localizes to both the nucleus and the cytoplasm and shares 96% sequence identity with its mouse counterpart. Functioning as a component of the exosome complex, EXOSC4 exhibits 3'-5' exonuclease activity and is required for the 3'-processing of 7S pre-RNA to mature 5.8S rRNA. The gene encoding EXOSC4 maps to human chromosome 8, which

consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

EXOSC4 Polyclonal Antibody - Additional Information

Gene ID 54512

Other Names
Exosome complex component RRP41, Exosome component 4, Ribosomal RNA-processing protein 41, p12A, EXOSC4, RRP41, SKI6

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

EXOSC4 Polyclonal Antibody - Protein Information

Name EXOSC4

Synonyms RRP41, SKI6

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. EXOSC4 binds to ARE-containing RNAs.

Cellular Location
Cytoplasm. Nucleus, nucleolus. Nucleus. Nucleus, nucleoplasm

EXOSC4 Polyclonal Antibody - Protocols

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

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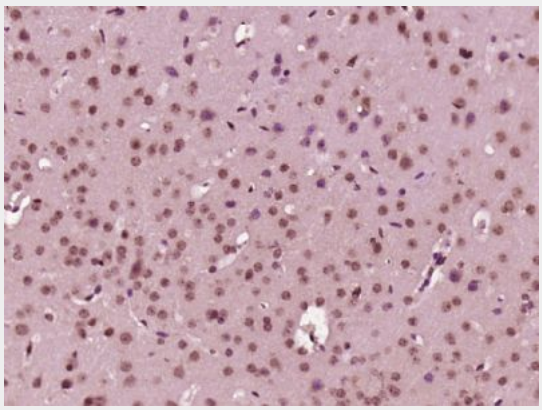
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EXOSC4 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EXOSC4) Polyclonal Antibody, Unconjugated (bs-14667R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.