

EXOSC4 Rabbit pAb

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Catalog # AP55667

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9NPD3
Reactivity	Mouse
Predicted	Rat, Pig, Dog, Human, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	26383
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.
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.

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=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C 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 °C.

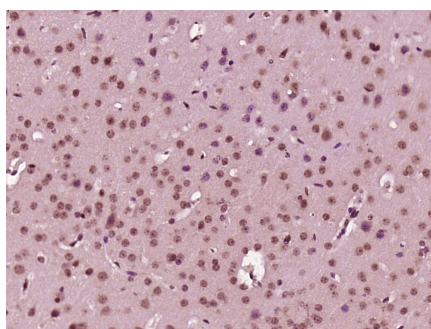
Protein Information

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

Background

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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 (AP55667) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.