

EXOSC7 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55068

Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession Q15024

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 31821
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human EXOSC7

Epitope Specificity 21-120/291 **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 Nucleus; nucleolus. Cytoplasm. Nucleus.

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

EXOSC1. Interacts with ZC3HAV1.

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 of 3' to 5' exoribonucleases. It is

involved in a variety of cellular processes and is responsible for degrading unstable mRNAs that contain AU-rich elements in their untranslated 3' region. EXOSC7 (exosome component 7), also known as p8, EAP1, RRP42 (Ribosomal RNA-processing protein 42), Rrp42p or hRrp42p, is a component of the exosome multienzyme ribonuclease complex. It belongs to the RNase PH family and localizes to the nucleolus. EXOSC7 is one of the six RNase-PH domain subunits of the exosome. Together, these six subunits form a PNPase-like ring. EXOSC7 is required for the processing of the 7S pre-RNA.

Additional Information

Gene ID 23016

Other Names Exosome complex component RRP42, Exosome component 7, Ribosomal

RNA-processing protein 42, p8, EXOSC7, KIAA0116, RRP42

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When **Storage**

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

EXOSC7 Name

Synonyms KIAA0116, RRP42

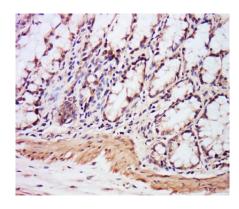
Function Non-catalytic component of the RNA exosome complex which has 3'->5'

> 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.

Cellular Location Nucleus, nucleolus. Cytoplasm. Nucleus

Images



Tissue/cell: Rat intestine tissue: 4%

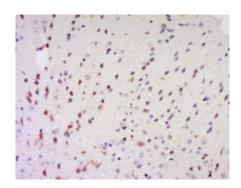
Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-EXOSC7 Polyclonal Antibody, Unconjugated(AP55068) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Tissue/cell: Rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3%



Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-EXOSC7 Polyclonal Antibody, Unconjugated(AP55068) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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