

EXOSC7 Antibody / Exosome complex component RRP42 Antibody (FY13639)

Catalog No.	Formulation	Size
FY13639	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
UniProt	Q15024
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunoprecipitation : 2ug per 500ug of lysate ELISA : 0.1-0.5 ug/ml
Limitations	The EXOSC7 Antibody / Exosome complex component RRP42 Antibody is available for research use only.

EXOSC7 Antibody by IHC in human colon carcinoma. Immunohistochemistry of paraffin-embedded human colon carcinoma using Exosome complex component RRP42 Antibody reveals brown DAB staining in malignant glandular epithelium with hematoxylin-counterstained nuclei. Heat-mediated antigen retrieval used EDTA buffer at pH 8.0, followed by incubation with 2 ug/mL primary antibody overnight at 40C and peroxidase-based visualization.

EXOSC7 Antibody by IHC in human skin carcinoma. Immunohistochemistry of paraffin-embedded human skin carcinoma using Exosome complex component RRP42 Antibody shows brown DAB-positive staining in tumor cell regions, with blue hematoxylin nuclear counterstaining. Sections underwent EDTA antigen retrieval at pH 8.0 and were incubated with 2 ug/mL primary antibody overnight at 40C before HRP-based detection.

EXOSC7 Antibody by WB in human and rodent lysates. Western blot analysis using Exosome complex component RRP42 Antibody detects a band near 37 kDa, compared with the calculated molecular weight of approximately 32 kDa. Lanes contain human A431 (1), 293T (2), and HeLa (3) cells, rat brain (4), rat RH35 cells (5), mouse brain (6), and mouse NIH/3T3 cells (7). Reduced lysates containing 30 ug protein per lane were separated by 10% SDS-PAGE and transferred to nitrocellulose. Membranes were blocked with 5% nonfat milk, incubated with 0.5 ug/mL primary antibody overnight at 4oC, and developed by HRP-mediated chemiluminescence.

EXOSC7 Antibody by IP in HeLa cells. Immunoprecipitation of EXOSC7 from HeLa whole-cell lysate was assessed by Western blot using Exosome complex component RRP42 Antibody. Lane 1 shows input lysate (30 ug), lane 2 rabbit IgG control immunoprecipitate, and lane 3 specific immunoprecipitate prepared with 2 ug antibody and 500 ug lysate. The EXOSC7 band is visible near 37 kDa in the input and specific immunoprecipitate. A separate band around 50 kDa in immunoprecipitation lanes corresponds to immunoglobulin heavy chain.

Description

EXOSC7 Antibody / Exosome complex component RRP42 Antibody targets RRP42, a core structural subunit of the eukaryotic RNA exosome. Despite its name, this exosome is not an extracellular vesicle: it is an intracellular multiprotein machine involved in RNA processing, surveillance, and degradation. EXOSC7 forms part of the conserved nine-subunit exosome core, which organizes RNA substrates for delivery to associated ribonucleases.

The core exosome contains a ring of six RNase PH-like proteins capped by three RNA-binding subunits. EXOSC7 contributes to the ring architecture that supports substrate channeling and interactions with catalytic partners. In eukaryotes, the core itself is largely structural, while nuclease activity is provided principally by associated enzymes such as DIS3 and EXOSC10. This distinction matters because loss of a structural component can compromise RNA metabolism by destabilizing substrate handling even without eliminating a catalytic active site within that component.

The RNA exosome acts on a diverse range of transcripts. It helps mature ribosomal RNA and other noncoding RNAs, remove improperly processed RNA species, and limit accumulation of unstable transcription products. Nuclear and cytoplasmic exosome assemblies have overlapping but distinct accessory factors that guide them toward appropriate substrates. These cofactors determine which RNA molecules are recognized and whether they undergo trimming or more extensive degradation.

RNA quality control is essential because transcription produces numerous intermediate and aberrant molecules that should not persist indefinitely. Failure to clear such RNA can alter gene expression, perturb ribosome biogenesis, and increase cellular stress. EXOSC7 is therefore best considered within the coordinated architecture of the exosome rather than as a stand-alone RNA-degrading enzyme. NSJ Bioreagents offers this EXOSC7 Antibody to support investigation of RRP42's contribution to exosome integrity and the pathways that maintain RNA homeostasis. Understanding the structural basis of exosome function helps explain how cells distinguish productive RNA maturation from disposal of unwanted transcripts.

Explore related research targets in our [Cell Biology Antibodies](#) collection.

Application Notes

Investigators should determine the optimal dilution of the EXOSC7 Antibody / Exosome complex component RRP42 Antibody empirically for their experimental conditions.

Immunogen

The EXOSC7 Antibody was generated using e. coli-derived human EXOSC7 recombinant protein (amino acids M1-G291).

Storage

The EXOSC7 Antibody is stable for up to one month at 4oC after reconstitution. For longer-term storage, aliquot and store at -20oC for up to six months. Do not repeatedly freeze and thaw.

Alternate Names

EXOSC7 antibody, Exosome complex component RRP42 antibody, exosome component 7 antibody, EAP1 antibody, hRrp42p antibody, KIAA0116 antibody