

RRP9 (RS-9): sc-100592

BACKGROUND

RRP9 (ribosomal RNA processing 9), also known as small subunit (SSU) processome component), RNU3IP2 or U355K, is a 475 amino acid nucleolar protein that belongs to the WD repeat RRP9 family. One of several components of a small nucleolar ribonucleoprotein particle (snoRNP), RRP9 is thought to be involved in the modification and processing of precursor rRNA (ribosomal RNA). Specifically, RRP9 interacts with the U3 snoRNA complex and binds a fragment of the complex that contains a box B/C motif and is known as 3UBC. The association of RRP9 with 3UBC is dependent upon two factors: binding of an snRNP protein known as NHPX to the B/C motif and a conserved tertiary structure that flanks the B/C motif. If the NHPK protein is bound and the conserved structure is present, RRP9 can interact with 3UBC and participate in pre-rRNA processing. RRP9 contains seven WD repeats that are necessary for both its nucleolar localization and its ability to bind U3 snoRNA.

REFERENCES

1. Pluk, H., et al. 1998. cDNA cloning and characterization of the human U3 small nucleolar ribonucleoprotein complex-associated 55-kilodalton protein. *Mol. Cell. Biol.* 18: 488-498.
2. Venema, J., et al. 2000. Yeast Rrp9p is an evolutionarily conserved U3 snoRNP protein essential for early pre-rRNA processing cleavages and requires box C for its association. *RNA* 6: 1660-1671.

CHROMOSOMAL LOCATION

Genetic locus: RRP9 (human) mapping to 3p21.2.

SOURCE

RRP9 (RS-9) is a mouse monoclonal antibody raised against recombinant RRP9 of human origin.

PRODUCT

Each vial contains 50 µg IgG_{2b} kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RRP9 (RS-9) is recommended for detection of RRP9 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RRP9 siRNA (h): sc-78299, RRP9 shRNA Plasmid (h): sc-78299-SH and RRP9 shRNA (h) Lentiviral Particles: sc-78299-V.

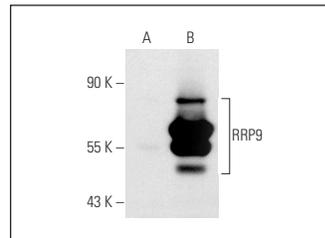
Molecular Weight of RRP9: 52 kDa.

Positive Controls: RRP9 (h): 293T Lysate: sc-174103 or Jurkat whole cell lysate: sc-2204.

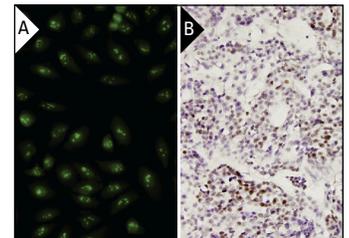
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



RRP9 (RS-9): sc-100592. Western blot analysis of RRP9 expression in non-transfected: sc-117752 (A) and human RRP9 transfected: sc-174103 (B) 293T whole cell lysates.



RRP9 (RS-9): sc-100592. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and nucleolar localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human ovary, clear cell carcinoma tissue showing nuclear localization (B).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.