

# RRP12 (N-15): sc-139045

## BACKGROUND

Ribosomes are the organelles that catalyze protein synthesis. Each ribosome consists of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. RRP12 (ribosomal RNA processing 12) is a 1,297 amino acid single-pass membrane protein that participates in ribosomal assembly. Expressed in testis and ovary, RRP12 belongs to the RRP12 family and localizes to the nucleus. RRP12 may be involved in coupling the control of ribosome production to the regulation of other cellular processes during cell cycle progression. In conjunction with Dim2, RRP12 is thought to be involved in the nucleocytoplasmic translocation of pre-ribosomes during ribosome assembly. RRP12 exists two alternatively spliced isoforms and is encoded by a gene located on human chromosome 10q24.1.

## REFERENCES

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2. Yoshihama, M., Uechi, T., Asakawa, S., Kawasaki, K., Kato, S., Higa, S., Maeda, N., Minoshima, S., Tanaka, T., Shimizu, N. and Kenmochi, N. 2002. The human ribosomal protein genes: sequencing and comparative analysis of 73 genes. *Genome Res.* 12: 379-390.
3. Oeffinger, M., Dlakic, M. and Tollervey, D. 2004. A pre-ribosome-associated HEAT-repeat protein is required for export of both ribosomal subunits. *Genes Dev.* 18: 196-209.
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## CHROMOSOMAL LOCATION

Genetic locus: RRP12 (human) mapping to 10q24.1; Rrp12 (mouse) mapping to 19 C3.

## SOURCE

RRP12 (N-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of RRP12 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139045 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

RRP12 (N-15) is recommended for detection of RRP12 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other RRP family members.

RRP12 (N-15) is also recommended for detection of RRP12 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for RRP12 siRNA (h): sc-90733, RRP12 siRNA (m): sc-153129, RRP12 shRNA Plasmid (h): sc-90733-SH, RRP12 shRNA Plasmid (m): sc-153129-SH, RRP12 shRNA (h) Lentiviral Particles: sc-90733-V and RRP12 shRNA (m) Lentiviral Particles: sc-153129-V.

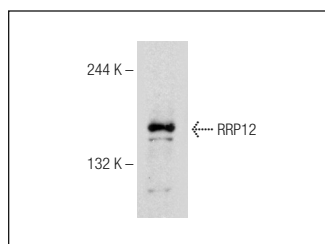
Molecular Weight of RRP12: 144 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



RRP12 (N-15): sc-139045. Western blot analysis of RRP12 expression in Jurkat nuclear extract.

## STORAGE

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

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Try **RRP12 (A-3): sc-398593**, our highly recommended monoclonal alternative to RRP12 (N-15).