

Rpp20 (N-20): sc-244043

BACKGROUND

Ribonuclease P (RNase P) and Ribonuclease MRP (RNase MRP) are small nuclear ribonucleoproteins (snRNPs) that act on RNA substrates *in vitro*. RNase P and RNase MRP, which accumulate in the nucleolus, have a similar RNA component and also have several protein subunits in common. RNase P, which consists of a complex of an RNA species, POP1, POP5 and at least seven Rpps, remove the 5' leader sequences from precursor tRNA molecules. Rpp20 (ribonuclease P protein subunit p20), also known as POP7 (processing of precursor 7, ribonuclease P/MRP subunit) or RPP2, is a 140 amino acid nuclear protein that belongs to the histone-like Alba family and functions as a component of nuclear RNase P and RNase MRP ribonucleoproteins. The gene encoding Rpp20 maps to human chromosome 7q22.1 and mouse chromosome 5 G2.

REFERENCES

- Engelke, D.R., et al. 1995. Structure-function analysis in nuclear RNase P RNA. *Mol. Biol. Rep.* 22: 157-160.
- Stolc, V., et al. 1998. Rpp2, an essential protein subunit of nuclear RNase P, is required for processing of precursor tRNAs and 35S precursor rRNA in *Saccharomyces cerevisiae*. *Proc. Natl. Acad. Sci. USA* 95: 6716-6721.

CHROMOSOMAL LOCATION

Genetic locus: POP7 (human) mapping to 7q22.1; Pop7 (mouse) mapping to 5 G2.

SOURCE

Rpp20 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Rpp20 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244043 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rpp20 (N-20) is recommended for detection of Rpp20 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Rpp family members.

Rpp20 (N-20) is also recommended for detection of Rpp20 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Rpp20 siRNA (h): sc-89498, Rpp20 siRNA (m): sc-153110, Rpp20 shRNA Plasmid (h): sc-89498-SH, Rpp20 shRNA Plasmid (m): sc-153110-SH, Rpp20 shRNA (h) Lentiviral Particles: sc-89498-V and Rpp20 shRNA (m) Lentiviral Particles: sc-153110-V.

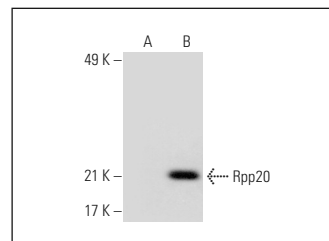
Molecular Weight of Rpp20: 16 kDa.

Positive Controls: Rpp20 (m): 293T Lysate: sc-123294.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Rpp20 (N-20): sc-244043. Western blot analysis of Rpp20 expression in non-transfected: sc-117752 (A) and mouse Rpp20 transfected: sc-123294 (B) 293T whole cell lysates.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Rpp20 (D-6): sc-514903**, our highly recommended monoclonal alternative to Rpp20 (N-20).