

Rpp30 (h): 293T Lysate: sc-174755

BACKGROUND

Ribonuclease P (PNase 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 (H1 RNA), POP1 (Processing of Precursor 1), POP5 (Processing of Precursor 5), and at least seven Rpps (including Rpp14, Rpp29, Rpp30 and Rpp38), removes the 5' leader sequences from precursor tRNA molecules. In particular, the nucleolar-localizing RNase P catalyzes the hydrolysis of a specific phosphodiester bond in precursor tRNA to form the mature 5' end of tRNA. The structurally related RNase MRP plays an essential role in the formation of the 5' end of 5.8S rRNA. Both RNase P and RNase MRP are associated with Th/To ribonucleoproteins; Rpp30 and Rpp38 have specifically been implicated as Th autoantigens which contribute to the autoimmune disease systemic sclerosis.

REFERENCES

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7. van Eenennaam, H., van der Heijden, A., Janssen, R.J., van Venrooij, W.J. and Pruijn, G.J. 2001. Basic domains target protein subunits of the RNase MRP complex to the nucleolus independently of complex association. Mol. Biol. Cell. 12: 3680-3689.

CHROMOSOMAL LOCATION

Genetic locus: RPP30 (human) mapping to 10q23.31.

PRODUCT

Rpp30 (h): 293T Lysate represents a lysate of human Rpp30 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

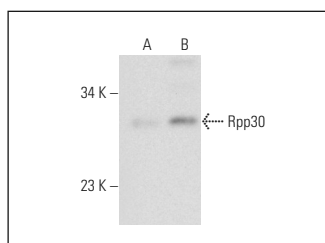
APPLICATIONS

Rpp30 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Rpp30 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Rpp30 (2931D5a): sc-81374 is recommended as a positive control antibody for Western Blot analysis of enhanced human Rpp30 expression in Rpp30 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



Rpp30 (2931D5a): sc-81374. Western blot analysis of Rpp30 expression in non-transfected: sc-117752 (A) and human Rpp30 transfected: sc-174755 (B) 293T whole cell lysates.

PROTOCOLS

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