Rpp20 (m): 293T Lysate: sc-123294



The Power to Question

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

- 1. Engelke, D.R., Pagán-Ramos, E. and Tranguch, A.J. 1995. Structure-function analysis in nuclear RNase P RNA. Mol. Biol. Rep. 22: 157-160.
- Stolc, V., Katz, A. and Altman, S. 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.
- 3. Jarrous, N., Eder, P.S., Guerrier-Takada, C., Hoog, C. and Altman, S. 1998. Autoantigenic properties of some protein subunits of catalytically active complexes of human ribonuclease P. RNA 4: 407-417.
- 4. Jiang, T. and Altman, S. 2001. Protein-protein interactions with subunits of human nuclear RNase P. Proc. Natl. Acad. Sci. USA 98: 920-925.
- Hua, Y. and Zhou, J. 2004. Rpp20 interacts with SMN and is redistributed into SMN granules in response to stress. Biochem. Biophys. Res. Commun. 314: 268-276.
- 6. Welting, T.J., van Venrooij, W.J. and Pruijn, G.J. 2004. Mutual interactions between subunits of the human RNase MRP ribonucleoprotein complex. Nucleic Acids Res. 32: 2138-2146.
- Hands-Taylor, K.L., Martino, L., Tata, R., Babon, J.J., Bui, T.T., Drake, A.F., Beavil, R.L., Pruijn, G.J., Brown, P.R. and Conte, M.R. 2010. Heterodimerization of the human RNase P/MRP subunits Rpp20 and Rpp25 is a prerequisite for interaction with the P3 arm of RNase MRP RNA. Nucleic Acids Res. 38: 4052-4066.

CHROMOSOMAL LOCATION

Genetic locus: Pop7 (mouse) mapping to 5 G2.

PRODUCT

Rpp20 (m): 293T Lysate represents a lysate of mouse Rpp20 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.

APPLICATIONS

Rpp20 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Rpp20 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.

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.

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