Rpp25 (h): 293T Lysate: sc-371368



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 7 Rpps, removes the 5' leader sequences from precursor tRNA molecules. RPP25 (ribonuclease P/MRP 25 kDa subunit) is a 199 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. Rpp25 is encoded by a gene that maps to human chromosome 15q24.2 and mouse chromosome 9 B.

REFERENCES

- 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.
- van Eenennaam, H., Jarrous, N., van Venrooij, W.J. and Pruijn, G.J. 2000.
 Architecture and function of the human endonucleases RNase P and RNase MRP. IUBMB Life 49: 265-272.
- 3. 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.
- Jiang, T., Guerrier-Takada, C. and Altman, S. 2001. Protein-RNA interactions in the subunits of human nuclear RNase P. RNA 7: 937-941.
- Guerrier-Takada, C., Eder, P.S., Gopalan, V. and Altman, S. 2002. Purification and characterization of Rpp25, an RNA-binding protein subunit of human ribonuclease P. RNA 8: 290-295.
- 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.
- 7. Roberts, J.D., Chiche, J.D., Kolpa, E.M., Bloch, D.B. and Bloch, K.D. 2007. cGMP-dependent protein kinase I interacts with TRIM39R, a novel Rpp21 domain-containing TRIM protein. Am. J. Physiol. Lung Cell. Mol. Physiol. 293: L903-L912.

CHROMOSOMAL LOCATION

Genetic locus: RPP25 (human) mapping to 15q24.2.

PRODUCT

Rpp25 (h): 293T Lysate represents a lysate of human Rpp25 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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

Rpp25 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Rpp25 antibodies. Recommended use: 10-20 µl per lane.

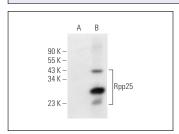
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Rpp25 (A-3): sc-514323 is recommended as a positive control antibody for Western Blot analysis of enhanced human Rpp25 expression in Rpp25 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Rpp25 (A-3): sc-514323. Western blot analysis of Rpp25 expression in non-transfected: sc-117752 (A) and human Rpp25 transfected: sc-371368 (B) 293T whole cell Ivsates

PROTOCOLS

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