

mrnp41 (h): 293T Lysate: sc-111781

BACKGROUND

mrnp41 (mRNA-binding protein, 41-KD), also known as Rae1 protein homolog and mRNA export factor, is a 368 amino acid protein that binds mRNA and is involved in nucleocytoplasmic transport. Though characterized in both the nucleus and cytoplasm, mrnp41 is primarily localized to the nuclear pore complex in the nuclear envelope. Mutations in mrnp41 may result in the accumulation of poly(A)-containing mRNA in the nucleus, further supporting the role of mrnp41 as a primary nuclear exporter of mRNA. Along with Nup98, mrnp41 has been shown to regulate E-cadherin, an activating subunit of the anaphase-promoting complex complex, which results in the prevention of securin degradation, therefore suggesting that mrnp41 may play a potential role in maintaining euploidy. Also, during mitosis, both mrnp41 and NuMA have been shown to be required for bipolar spindle formation.

REFERENCES

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8. Satterly, N., et al. 2007. Influenza virus targets the mRNA export machinery and the nuclear pore complex. *Proc. Natl. Acad. Sci. USA* 104: 1853-1858.
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CHROMOSOMAL LOCATION

Genetic locus: RAE1 (human) mapping to 20q13.31.

PRODUCT

mrnp41 (h): 293T Lysate represents a lysate of human mrnp41 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

mrnp41 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive mrnp41 antibodies. Recommended use: 10-20 µl per lane.

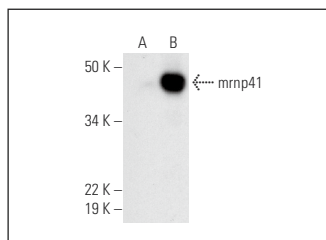
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

mrnp41 (H-3): sc-393252 is recommended as a positive control antibody for Western Blot analysis of enhanced human mrnp41 expression in mrnp41 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-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



mrnp41 (H-3): sc-393252. Western blot analysis of mrnp41 expression in non-transfected: sc-117752 (A) and human mrnp41 transfected: sc-111781 (B) 293T whole cell lysates.

PROTOCOLS

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