RBM8 (m): 293T Lysate: sc-123017



The Power to Question

BACKGROUND

The exon junction complex (EJC) is a multiprotein complex that assembles approximately 20-24 nucleotides upstream of exon-exon junctions in pre-mRNAs. It is involved in mRNA export, cytoplasmic localization and nonsense- mediated mRNA decay. Members of the EJC include Y14, Aly/REF, Magoh, RNPS1, SRm160 and DEK. Aly/REF, Magoh and Y14, also designated RBM8, make up the core of the EJC, and these proteins remain stably bound to spliced mRNAs in the cytoplasm until they are translated. Therefore, Y14, Aly/REF and Magoh have the ability to communicate to the cytoplasm the processing history of the mRNA, including the position of the removed introns. The gene encoding human Y14 encodes three transcripts. Y14 is a ubiquitously expressed protein. Although Y14 shuttles to the cytoplasm, it is predominantly detected in the nucleus and is co-localized with oskar mRNA at the posterior pole of the cell.

REFERENCES

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- Hachet, O. and Ephrussi, A. 2001. *Drosophila* Y14 shuttles to the posterior of the oocyte and is required for oskar mRNA transport. Curr. Biol. 11: 1666-1674.
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- Kim, V.N. and Dreyfus, G. 2001. Nuclear mRNA binding proteins couple pre-mRNA splicing and post-splicing events. Mol. Cells 12: 1-10.
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- Dostie, J. and Dreyfuss, G. 2002. Translation is required to remove Y14 from mRNAs in the cytoplasm. Curr. Biol. 12: 1060-1067.

CHROMOSOMAL LOCATION

Genetic locus: Rbm8a (mouse) mapping to 3 F2.1.

PRODUCT

RBM8 (m): 293T Lysate represents a lysate of mouse RBM8 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

RBM8 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive RBM8 antibodies. Recommended use: 10-20 µl per lane.

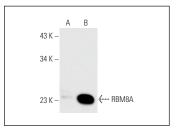
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Y14 (4C4): sc-32312 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse RBM8 expression in RBM8 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



Y14 (4C4): sc-32312. Western blot analysis of RBM8A expression in non-transfected: sc-117752 (**A**) and mouse RBM8A transfected: sc-123017 (**B**) 293T whole rell lysates

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.