RBMY1F (h): 293T Lysate: sc-171485



The Power to Question

BACKGROUND

The RBM (RNA-binding motif) family of proteins contain RNA binding motifs, which may indicate involvement in pre-mRNA splicing events. The RBM gene family, including RBMY1A, RBMY1B, RBMY1D, RBMY1E, RBMY1F, RBMY1H and RBMY1J, is comprised of at least 30 genes and pseudogenes, found on both arms of the Y chromosome. Micro-deletions of the AZFb region of the Y chromosome, which contains a number of RBMY genes, usually results in severe consequences for spermatogenesis. RBMY1F (RNA binding motif protein, Y-linked, family 1, member F), also known as YRRM2, is a 496 amino acid testis-specific nuclear protein expressed in all transcriptionally active stages of germ cell development from spermatogonia through spermatocytes and round spermatids. RBMY1F contains a RNA-binding motif in the N-terminus and four SRGY (serine, arginine, glycine, tyrosine) boxes in the C-terminus. RBMY1F is expressed as two alternatively spliced isoforms.

REFERENCES

- Ma, K., Inglis, J.D., Sharkey, A., Bickmore, W.A., Hill, R.E., Prosser, E.J., Speed, R.M., Thomson, E.J., Jobling, M. and Taylor, K. 1993. A Y chromosome gene family with RNA-binding protein homology: candidates for the azoospermia factor AZF controlling human spermatogenesis. Cell 75: 1287-1295.
- Chai, N.N., Zhou, H., Hernandez, J., Najmabadi, H., Bhasin, S. and Yen, P.H. 1998. Structure and organization of the RBMY genes on the human Y chromosome: transposition and amplification of an ancestral autosomal hnRNPG gene. Genomics 49: 283-289.
- Elliott, D.J. 2000. RBMY genes and AZFb deletions. J. Endocrinol. Invest. 23: 652-658.
- Skaletsky, H., Kuroda-Kawaguchi, T., Minx, P.J., Cordum, H.S., Hillier, L., Brown, L.G., Repping, S., Pyntikova, T., Ali, J., Bieri, T., Chinwalla, A., Delehaunty, A., Delehaunty, K., Du, H., Fewell, G., Fulton, L., Fulton, R., et al. 2003. The male-specific region of the human Y chromosome is a mosaic of discrete sequence classes. Nature 423: 825-837.
- Vogt, P.H. 2005. Azoospermia factor (AZF) in Yq11: towards a molecular understanding of its function for human male fertility and spermatogenesis. Reprod. Biomed. Online 10: 81-93.
- Skrisovska, L., Bourgeois, C.F., Stefl, R., Grellscheid, S.N., Kister, L., Wenter, P., Elliott, D.J., Stevenin, J. and Allain, F.H. 2007. The testis-specific human protein RBMY recognizes RNA through a novel mode of interaction. EMBO Rep. 8: 372-379.
- 7. Zeng, M., Sun, H., Chen, S., Wang, X., Yang, Y., Liu, Y., Tao, D., Yang, Z., Zhang, S. and Ma, Y. 2008. Identification of target messenger RNA substrates for mouse RBMY. Mol. Hum. Reprod. 14: 331-336.
- Liu, Y., Bourgeois, C.F., Pang, S., Kudla, M., Dreumont, N., Kister, L., Sun, Y.H., Stevenin, J. and Elliott, D.J. 2009. The germ cell nuclear proteins hnRNPG-T and RBMY activate a testis-specific exon. PLoS Genet. 5: e1000707.
- Dreumont, N., Bourgeois, C.F., Lejeune, F., Liu, Y., Ehrmann, I.E., Elliott, D.J. and Stévenin, J. 2010. Human RBMY regulates germline-specific splicing events by modulating the function of the serine/arginine-rich proteins 9G8 and Tra2-β. J. Cell Sci. 123: 40-50.

CHROMOSOMAL LOCATION

Genetic locus: RBMY1F (human) mapping to Yg11.223.

PRODUCT

RBMY1F (h): 293T Lysate represents a lysate of human RBMY1F transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

RBMY1F (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive RBMY1F antibodies. Recommended use: 10-20 μ l per lane.

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

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.

PROTOCOLS

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

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