

RBMXL2 (P-13): sc-169120

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription and pre-mRNA processing, as well as mature mRNA transport to the cytoplasm and translation. They also bind heterogeneous nuclear RNA (hnRNA), which are the transcripts produced by RNA polymerase II. There are approximately 20 known hnRNP proteins, and their complexes are the major constituents of the spliceosome. The majority of hnRNP proteins are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm. RBMXL2 (RNA binding motif protein, X-linked-like 2), also known as hnRPGT (heterogeneous nuclear ribonucleoprotein G T) or hnRNP G-T, is a testis-specific hnRNP that is predominantly expressed in meiotic spermatocytes. Localizing to the nucleus, RBMXL2 contains one RNA recognition motif (RRM) and may replace the function of hnRNP G, acting as a germ cell-specific splicing regulator. Due to its specific function in spermatocytes, RBMXL2 is implicated in autosomal male infertility.

REFERENCES

1. Badolato, J., et al. 1995. Identification and characterisation of a novel human RNA-binding protein. *Gene* 166: 323-337.
2. Siomi, H., et al. 1995. A nuclear localization domain in the hnRNP A1 protein. *J. Cell Biol.* 129: 551-560.
3. Myer, V.E., et al. 1995. Isolation and characterization of a novel, low abundance hnRNP protein: A0. *RNA* 1: 171-182.
4. Hanamura, A., et al. 1998. Regulated tissue-specific expression of antagonistic pre-mRNA splicing factors. *RNA* 4: 430-444.
5. Melcak, I., et al. 2000. Nuclear pre-mRNA compartmentalization: trafficking of released transcripts to splicing factor reservoirs. *Mol. Biol. Cell* 11: 497-510.
6. Elliott, D.J., et al. 2000. An evolutionarily conserved germ cell-specific hnRNP is encoded by a retrotransposed gene. *Hum. Mol. Genet.* 9: 2117-2124.

CHROMOSOMAL LOCATION

Genetic locus: RBMXL2 (human) mapping to 11p15.4; Rbmxl2 (mouse) mapping to 7 E3.

SOURCE

RBMXL2 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RBMXL2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169120 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

RBMXL2 (P-13) is recommended for detection of RBMXL2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RBMXL2 siRNA (h): sc-96516, RBMXL2 siRNA (m): sc-152761, RBMXL2 shRNA Plasmid (h): sc-96516-SH, RBMXL2 shRNA Plasmid (m): sc-152761-SH, RBMXL2 shRNA (h) Lentiviral Particles: sc-96516-V and RBMXL2 shRNA (m) Lentiviral Particles: sc-152761-V.

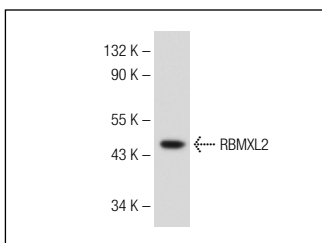
Molecular Weight of RBMXL2: 43 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or mouse testis extract: sc-2405

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



RBMXL2 (P-13): sc-169120. Western blot analysis of RBMXL2 expression in mouse testis tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **RBMXL2 (RR-17): sc-101134**, our highly recommended monoclonal alternative to RBMXL2 (P-13).