

RBMX (H-80): sc-48796

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription, 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 components are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm. RBMX (also known as hnRNP G) is a glycoprotein originally identified as an autoantigen from German shepherd dogs with lupus-like syndrome. The gene encoding RBMX is located on chromosome Xq26 and is ubiquitously expressed. It contains one RNP-consensus RNA binding domain (RBD) and is related to RBMY, which is involved in spermatogenesis, and RBMXL2, which is a testis specific protein. All three proteins interact with Tra2b, and therefore are involved in pre-mRNA splicing.

REFERENCES

1. Soulard, M., et al. 1993. hnRNP G: sequence and characterization of a glycosylated RNA-binding protein. *Nucleic Acids Res.* 21: 4210-4217.
2. Badolato, J., et al. 1995. Identification and characterisation of a novel human RNA-binding protein. *Gene* 166: 323-337.
3. Siomi, H. et al. 1995. A nuclear localization domain in the hnRNP A1 protein. *J. Cell Biol.* 129: 551-560.
4. Soulard, M., et al. 1996. The I protein of the heterogeneous nuclear ribonucleoprotein complex is a novel dog nuclear autoantigen. *J. Autoimmun.* 9: 599-608.

CHROMOSOMAL LOCATION

Genetic locus: RBMX (human) mapping to Xq26.3; Rbmx (mouse) mapping to X A5.

SOURCE

RBMX (H-80) is a rabbit polyclonal antibody raised against amino acids 312-391 mapping at the C-terminus of RBMX 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48796 X, 200 µg/0.1 ml.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

RBMX (H-80) is recommended for detection of RBMX of human, mouse, and rat origin, and RBMXRT of mouse and rat origin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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); may cross-react with RBMXL2.

Suitable for use as control antibody for RBMX siRNA (h): sc-38274, RBMX siRNA (m): sc-38275, RBMX shRNA Plasmid (h): sc-38274-SH, RBMX shRNA Plasmid (m): sc-38275-SH, RBMX shRNA (h) Lentiviral Particles: sc-38274-V and RBMX shRNA (m) Lentiviral Particles: sc-38275-V.

RBMX (H-80) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

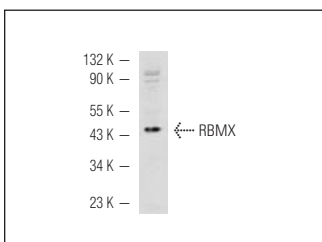
Molecular Weight of RBMX: 43 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, UV-treated HeLa nuclear extract or RBMX (m): 293T Lysate: sc-123020.

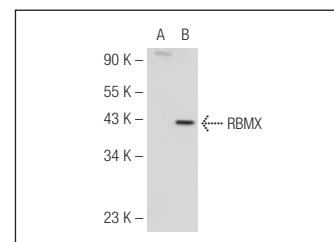
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



RBMX (H-80): sc-48796. Western blot analysis of RBMX expression in K-562 nuclear extract.



RBMX (H-80): sc-48796. Western blot analysis of RBMX expression in non-transfected (A) and mouse RBMX transfected: sc-123020 (B) 293T whole cell lysates.

RESEARCH USE

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