

RBM3 (A-7): sc-390139

BACKGROUND

RBM3 (RNA binding motif (RNP1, RRM) protein 3), also known as RNPL, is a 157 amino acid protein that contains one RRM domain and is subject to post-translational dimethylation. Induced by cold shock and low oxygen tension, RBM3 exists as multiple alternatively spliced isoforms and is thought to function as a proto-oncogene, possibly playing a role in tumor transformation and metastasis. The gene encoding RBM3 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

1. Derry, J.M., et al. 1995. RBM3, a novel human gene in Xp11.23 with a putative RNA-binding domain. *Hum. Mol. Genet.* 4: 2307-2311.
2. Danno, S., et al. 1997. Increased transcript level of RBM3, a member of the glycine-rich RNA-binding protein family, in human cells in response to cold stress. *Biochem. Biophys. Res. Commun.* 236: 804-807.
3. Chappell, S.A. and Mauro, V.P. 2003. The internal ribosome entry site (IRES) contained within the RNA-binding motif protein 3 (RBM3) mRNA is composed of functionally distinct elements. *J. Biol. Chem.* 278: 33793-33800.

CHROMOSOMAL LOCATION

Genetic locus: RBM3 (human) mapping to Xp11.23; Rbm3 (mouse) mapping to X A1.1.

SOURCE

RBM3 (A-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 43-75 within an internal region of RBM3 of human origin.

PRODUCT

Each vial contains 200 µg IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RBM3 (A-7) is available conjugated to agarose (sc-390139 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390139 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390139 PE), fluorescein (sc-390139 FITC), Alexa Fluor® 488 (sc-390139 AF488), Alexa Fluor® 546 (sc-390139 AF546), Alexa Fluor® 594 (sc-390139 AF594) or Alexa Fluor® 647 (sc-390139 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390139 AF680) or Alexa Fluor® 790 (sc-390139 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390139 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

RBM3 (A-7) is recommended for detection of RBM3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for RBM3 siRNA (h): sc-91221, RBM3 siRNA (m): sc-152741, RBM3 shRNA Plasmid (h): sc-91221-SH, RBM3 shRNA Plasmid (m): sc-152741-SH, RBM3 shRNA (h) Lentiviral Particles: sc-91221-V and RBM3 shRNA (m) Lentiviral Particles: sc-152741-V.

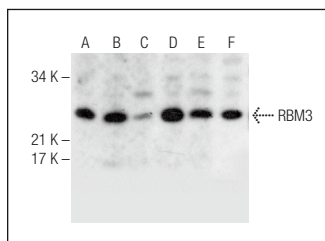
Molecular Weight of RBM3: 17 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NIH/3T3 whole cell lysate: sc-2210 or RAW 264.7 whole cell lysate: sc-2211.

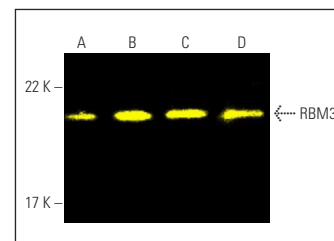
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RBM3 (A-7): sc-390139. Western blot analysis of RBM3 expression in OV-90 (A), C6 (B), Neuro-2A (C), HTC 116 (D), SW480 (E) and U-251 MG (F) whole cell lysates.



RBM3 (A-7) Alexa Fluor® 488: sc-390139 AF488. Direct fluorescent western blot analysis of RBM3 expression in Neuro-2A (A), Jurkat (B), NIH/3T3 (C) and RAW 264.7 (D) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214.

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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