

RBM17 (F-5): sc-515587

BACKGROUND

RBM17 (RNA binding motif protein 17), also known as SPF45 (splicing factor 45) is a 401 amino acid protein that localizes to the nucleus and contains one G-patch domain and one RRM (RNA recognition motif) domain. Interaction with multi-protein spliceosome complex, RBM17 functions as a splicing factor that binds to a specific region at the intron/exon border and is thought to be involved in the regulation of alternative splicing, as well as in the utilization of cryptic splice sites. The gene encoding RBM17 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

1. Neubauer, G., et al. 1998. Mass spectrometry and EST-database searching allows characterization of the multi-protein spliceosome complex. *Nat. Genet.* 20: 46-50.
2. Lallena, M.J., et al. 2002. Splicing regulation at the second catalytic step by Sex-lethal involves 3' splice site recognition by SPF45. *Cell* 109: 285-296.
3. Will, C.L., et al. 2002. Characterization of novel SF3b and 17S U2 snRNP proteins, including a human Prp5p homologue and an SF3b DEAD-box protein. *EMBO J.* 21: 4978-4988.

CHROMOSOMAL LOCATION

Genetic locus: RBM17 (human) mapping to 10p15.1; Rbm17 (mouse) mapping to 2 A1.

SOURCE

RBM17 (F-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 93-117 within an internal region of RBM17 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LIMK-1 (H-12) is available conjugated to agarose (sc-515585 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515585 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515585 PE), fluorescein (sc-515585 FITC), Alexa Fluor® 488 (sc-515585 AF488), Alexa Fluor® 546 (sc-515585 AF546), Alexa Fluor® 594 (sc-515585 AF594) or Alexa Fluor® 647 (sc-515585 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515585 AF680) or Alexa Fluor® 790 (sc-515585 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515587 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

RBM17 (F-5) is recommended for detection of RBM17 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 RBM17 siRNA (h): sc-90676, RBM17 siRNA (m): sc-152730, RBM17 shRNA Plasmid (h): sc-90676-SH, RBM17 shRNA Plasmid (m): sc-152730-SH, RBM17 shRNA (h) Lentiviral Particles: sc-90676-V and RBM17 shRNA (m) Lentiviral Particles: sc-152730-V.

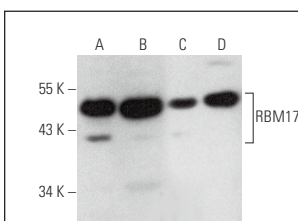
Molecular Weight of RBM17: 45 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or Ramos nuclear extract: sc-2153.

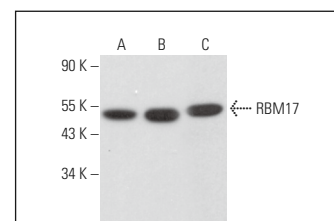
RECOMMENDED SUPPORT REAGENTS

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



RBM17 (F-5): sc-515587. Western blot analysis of RBM17 expression in K-562 (A), Jurkat (B), MDA-MB-231 (C) and Ramos (D) nuclear extracts.



RBM17 (F-5): sc-515587. Western blot analysis of RBM17 expression in Ramos nuclear extract (A) and NAMALWA (B) and RAW 264.7 (C) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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.