

RBM27 (H-9): sc-515704

BACKGROUND

Proteins containing RNA recognition motifs, including various hnRNP proteins, are implicated in the regulation of alternative splicing and protein components of snRNPs. The RBM (RNA-binding motif) gene family encodes proteins with an RNA binding motif that have been suggested to play a role in the modulation of apoptosis. RBM27 (RNA-binding motif protein 27) is a 1,060 amino acid protein that contains one C3H1-type zinc finger and one RRM (RNA recognition motif) domain. Incorporated into the nuclear speckles and to speckles proximal to the nuclear periphery, RBM27 also localizes to punctate structures in the cytoplasm termed cytospeckles mediated by RBM27's RRM domain. The RBM27 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish and maps to human chromosome 5p15.32.

REFERENCES

1. Varani, G. and Nagai, K. 1998. RNA recognition by RNP proteins during RNA processing. *Annu. Rev. Biophys. Biomol. Struct.* 27: 407-445.
2. Schmutz, J., et al. 2004. The DNA sequence and comparative analysis of human chromosome 5. *Nature* 43: 268-274.
3. Maris, C., et al. 2005. The RNA recognition motif, a plastic RNA-binding platform to regulate post-transcriptional gene expression. *FEBS J.* 272: 2118-2131.
4. Sutherland, L.C., et al. 2005. RNA binding motif (RBM) proteins: a novel family of apoptosis modulators? *J. Cell. Biochem.* 94: 5-24.
5. Sowa, M.E., et al. 2009. Defining the human deubiquitinating enzyme interaction landscape. *Cell* 138: 389-403.
6. Fukuda, T., et al. 2009. hnRNP K interacts with RNA binding motif protein 42 and functions in the maintenance of cellular ATP level during stress conditions. *Genes Cells* 14: 113-128.

CHROMOSOMAL LOCATION

Genetic locus: RBM27 (human) mapping to 5q32; Rbm27 (mouse) mapping to 18 B3.

SOURCE

RBM27 (H-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 466-489 within an internal region of RBM27 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RBM27 (H-9) is available conjugated to agarose (sc-515704 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515704 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515704 PE), fluorescein (sc-515704 FITC), Alexa Fluor® 488 (sc-515704 AF488), Alexa Fluor® 546 (sc-515704 AF546), Alexa Fluor® 594 (sc-515704 AF594) or Alexa Fluor® 647 (sc-515704 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515704 AF680) or Alexa Fluor® 790 (sc-515704 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

RBM27 (H-9) is recommended for detection of RBM27 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 RBM27 siRNA (h): sc-106929, RBM27 siRNA (m): sc-152738, RBM27 shRNA Plasmid (h): sc-106929-SH, RBM27 shRNA Plasmid (m): sc-152738-SH, RBM27 shRNA (h) Lentiviral Particles: sc-106929-V and RBM27 shRNA (m) Lentiviral Particles: sc-152738-V.

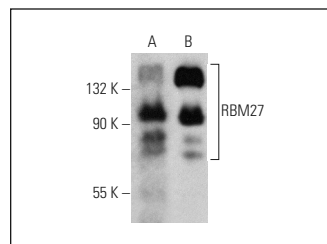
Molecular Weight of RBM27: 119 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, AMJ2-C8 whole cell lysate: sc-364366 or K-562 whole cell lysate: sc-2203.

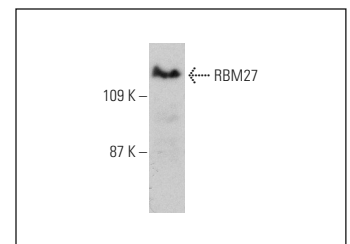
RECOMMENDED SUPPORT REAGENTS

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



RBM27 (H-9): sc-515704. Western blot analysis of RBM27 expression in Jurkat (A) and K-562 (B) whole cell lysates.



RBM27 (H-9): sc-515704. Western blot analysis of RBM27 expression in AMJ2-C8 whole cell lysate.

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.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA