

RBM7 (Y-20): sc-162084

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. RBM7 (RNA binding motif protein 7) is a 266 amino acid protein that contains one RRM (RNA recognition motif) domain and is suggested to participate in germ cell RNA processing and meiosis. Ubiquitously expressed, RBM7 is expressed in a cell-restricted fashion and is encoded by a gene that maps to human chromosome 11. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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2. Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. *Ann. Hum. Genet.* 67: 269-280.
3. Guo, T.B., et al. 2003. Spermatogenic expression of RNA-binding motif protein 7, a protein that interacts with splicing factors. *J. Androl.* 24: 204-214.
4. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. *J. Inherit. Metab. Dis.* 30: 654-663.
5. Bhuiyan, Z.A., et al. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-Nielsen syndrome. *Prog. Biophys. Mol. Biol.* 98: 319-327.
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CHROMOSOMAL LOCATION

Genetic locus: RBM7 (human) mapping to 11q23.2; Rbm7 (mouse) mapping to 9 A5.3.

SOURCE

RBM7 (Y-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RBM7 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-162084 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RBM7 (Y-20) is recommended for detection of RBM7 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); non cross-reactive with other RBM family members.

RBM7 (Y-20) is also recommended for detection of RBM7 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for RBM7 siRNA (h): sc-96828, RBM7 siRNA (m): sc-152755, RBM7 shRNA Plasmid (h): sc-96828-SH, RBM7 shRNA Plasmid (m): sc-152755-SH, RBM7 shRNA (h) Lentiviral Particles: sc-96828-V and RBM7 shRNA (m) Lentiviral Particles: sc-152755-V.

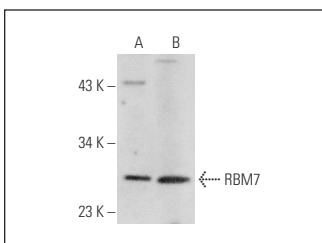
Molecular Weight of RBM7: 31 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257 or mouse liver extract: sc-2256.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



RBM7 (Y-20): sc-162084. Western blot analysis of RBM7 expression in RT-4 whole cell lysate (A) and mouse liver tissue extract (B).

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.