

RBM16 (C-15): sc-240809

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. RBM16 (RNA-binding motif protein 16), also known as CCAP7 (CDC5L complex-associated protein 7), is a 1,271 amino acid protein that contains one CID domain and one RRM (RNA recognition motif) domain. RBM16 interacts with Pol II (via C-terminus), with a much higher affinity for phosphorylated Pol II. Identified in a complex with Cdc5L and other spliceosomal proteins, RBM16 may associate with the spliceosome. The RBM16 gene is conserved in chimpanzee, canine, bovine, rat, chicken and zebrafish, and maps to human chromosome 6q25.2.

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. Patturajan, M., Wei, X., Berezney, R. and Corden, J.L. 1998. A nuclear matrix protein interacts with the phosphorylated C-terminal domain of RNA polymerase II. *Mol. Cell. Biol.* 18: 2406-2415.
3. Mungall, A.J., Palmer, S.A., Sims, S.K., Edwards, C.A., Ashurst, J.L., Wilming, L., Jones, M.C., Horton, R., Hunt, S.E., Scott, C.E., Gilbert, J.G., Clamp, M.E., Bethel, G., Milne, S., Ainscough, R., Almeida, J.P., Ambrose, K.D., Andrews, T.D. and Ashwell, R.I., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
4. Maris, C., Dominguez, C. and Allain, F.H. 2005. The RNA recognition motif, a plastic RNA-binding platform to regulate post-transcriptional gene expression. *FEBS J.* 272: 2118-2131.
5. Sutherland, L.C., Rintala-Maki, N.D., White, R.D. and Morin, C.D. 2005. RNA binding motif (RBM) proteins: a novel family of apoptosis modulators? *J. Cell. Biochem.* 94: 5-24.
6. Dephore, N., Zhou, C., Villen, J., Beausoleil, S.A., Bakalarski, C.E., Elledge, S.J. and Gygi, S.P. 2008. A quantitative atlas of mitotic phosphorylation. *Proc. Natl. Acad. Sci. USA* 105: 10762-10767.
7. Fukuda, T., Naiki, T., Saito, M. and Irie, K. 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: SCAF8 (human) mapping to 6q25.2; Scaf8 (mouse) mapping to 17 A1.

SOURCE

RBM16 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RBM16 of human origin.

STORAGE

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

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-240809 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RBM16 (C-15) is recommended for detection of RBM16 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

RBM16 (C-15) is also recommended for detection of RBM16 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for RBM16 siRNA (h): sc-95106, RBM16 siRNA (m): sc-152729, RBM16 shRNA Plasmid (h): sc-95106-SH, RBM16 shRNA Plasmid (m): sc-152729-SH, RBM16 shRNA (h) Lentiviral Particles: sc-95106-V and RBM16 shRNA (m) Lentiviral Particles: sc-152729-V.

Molecular Weight of RBM16: 141 kDa.

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) 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.

RESEARCH USE

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

PROTOCOLS

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