

RBM15 (S-19): sc-82351

BACKGROUND

RBM15 (RNA binding motif protein 15), also known as OTT, OTT1 or SPEN, is a 977 amino acid protein that localizes to the nucleus and contains one SPOC domain and 3 RRM domains. Expressed as multiple alternatively spliced isoforms, RBM15 interacts with Epstein-Barr (EBV) viral proteins and is thought to be involved in the regulation of Hox genes, possibly via interactions with RNA and spliceosome components. RBM15 is subject to post-translational phosphorylation, probably by ATM or ATR. Chromosomal aberrations involving the RBM15 gene, which localizes to human chromosome 1, may be associated with the development of acute megakaryoblastic leukemia.

REFERENCES

1. Ma, Z., et al. 2001. Fusion of two novel genes, RBM15 and MKL1, in the t(1;22)(p13;q13) of acute megakaryoblastic leukemia. *Nat. Genet.* 28: 220-221.
2. Mercher, T., et al. 2001. Involvement of a human gene related to the *Drosophila* spen gene in the recurrent t(1;22) translocation of acute megakaryocytic leukemia. *Proc. Natl. Acad. Sci. USA* 98: 5776-5779.
3. Mercher, T., et al. 2002. Recurrence of OTT-MAL fusion in t(1;22) of infant AML-M7. *Genes Chromosomes Cancer* 33: 22-28.
4. Hsiao, H.H., et al. 2005. RBM15-MKL1 (OTT-MAL) fusion transcript in an adult acute myeloid leukemia patient. *Am. J. Hematol.* 79: 43-45.
5. Hiriart, E., et al. 2005. Interaction of the Epstein-Barr virus mRNA export factor EB2 with human SPEN proteins SHARP, OTT1, and a novel member of the family, OTT3, links SPEN proteins with splicing regulation and mRNA export. *J. Biol. Chem.* 280: 36935-36945.
6. Lindtner, S., et al. 2006. RNA-binding motif protein 15 binds to the RNA transport element RTE and provides a direct link to the NXF1 export pathway. *J. Biol. Chem.* 281: 36915-36928.
7. Sawada, T., et al. 2008. Fusion of OTT to BSAC results in aberrant upregulation of transcriptional activity. *J. Biol. Chem.* 283: 26820-26828.
8. Online Mendelian Inheritance in Man, OMIM[™]. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 606077. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: RBM15 (human) mapping to 1p13.3; Rbm15 (mouse) mapping to 3 F2.3.

SOURCE

RBM15 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RBM15 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-82351 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RBM15 (S-19) is recommended for detection of RBM15 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 family member RBM4 or RBM10.

RBM15 (S-19) is also recommended for detection of RBM15 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RBM15 siRNA (h): sc-76365, RBM15 siRNA (m): sc-76366, RBM15 shRNA Plasmid (h): sc-76365-SH, RBM15 shRNA Plasmid (m): sc-76366-SH, RBM15 shRNA (h) Lentiviral Particles: sc-76365-V and RBM15 shRNA (m) Lentiviral Particles: sc-76366-V.

Molecular Weight of RBM15: 107 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.

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 or our catalog for detailed protocols and support products.