RBM15 (K-15): sc-82348



The Power to Question

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 *Droso-phila* spen gene in the recurrent t(1;22) translocation of acute megakary-ocytic 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.
- 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.
- 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 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RBM15 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82348 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RBM15 (K-15) 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 (K-15) 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.

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