

# RBM17 (P-16): sc-163283

## BACKGROUND

RBM17 (RNA binding motif protein 17), also known as SPF45 (splicing factor 45) is a 401 amino acid protein that localizes to the nucleus and contains one G-patch domain and one RRM (RNA recognition motif) domain. Interaction with the multi-protein spliceosome complex, RBM17 functions as a splicing factor that binds to a specific region at the intron/exon border and is thought to be involved in the regulation of alternative splicing, as well as in the utilization of cryptic splice sites. The gene encoding RBM17 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

## REFERENCES

1. Neubauer, G., et al. 1998. Mass spectrometry and EST-database searching allows characterization of the multi-protein spliceosome complex. *Nat. Genet.* 20: 46-50.
2. Lallena, M.J., et al. 2002. Splicing regulation at the second catalytic step by Sex-lethal involves 3' splice site recognition by SPF45. *Cell* 109: 285-296.
3. Will, C.L., et al. 2002. Characterization of novel SF3b and 17S U2 snRNP proteins, including a human Prp5p homologue and an SF3b DEAD-box protein. *EMBO J.* 21: 4978-4988.
4. Sampath, J., et al. 2003. Human SPF45, a splicing factor, has limited expression in normal tissues, is overexpressed in many tumors, and can confer a multidrug-resistant phenotype to cells. *Am. J. Pathol.* 163: 1781-1790.
5. Perry, W.L., et al. 2005. Human splicing factor SPF45 (RBM17) confers broad multidrug resistance to anticancer drugs when overexpressed—a phenotype partially reversed by selective estrogen receptor modulators. *Cancer Res.* 65: 6593-6600.
6. Corsini, L., et al. 2007. U2AF-homology motif interactions are required for alternative splicing regulation by SPF45. *Nat. Struct. Mol. Biol.* 14: 620-629.

## CHROMOSOMAL LOCATION

Genetic locus: RBM17 (human) mapping to 10p15.1; Rbm17 (mouse) mapping to 2 A1.

## SOURCE

RBM17 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RBM17 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-163283 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

RBM17 (P-16) is recommended for detection of RBM17 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.

RBM17 (P-16) is also recommended for detection of RBM17 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RBM17 siRNA (h): sc-90676, RBM17 siRNA (m): sc-152730, RBM17 shRNA Plasmid (h): sc-90676-SH, RBM17 shRNA Plasmid (m): sc-152730-SH, RBM17 shRNA (h) Lentiviral Particles: sc-90676-V and RBM17 shRNA (m) Lentiviral Particles: sc-152730-V.

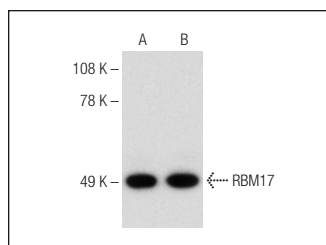
Molecular Weight of RBM17: 45 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132 or K-562 nuclear extract: sc-2130.

## 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.

## DATA



RBM17 (P-16): sc-163283. Western blot analysis of RBM17 expression in Jurkat (A) and K-562 (B) nuclear extracts.

## STORAGE

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



Try **RBM17 (F-5): sc-515587**, our highly recommended monoclonal alternative to RBM17 (P-16).