

# RBM9 (G-14): sc-86811

## BACKGROUND

RBM9 (RNA binding motif protein 9), also known as RTA, fxb, FOX2, Fox-2, HNRBP2 or HRNBP2, is a 390 amino acid protein that contains one RRM (RNA recognition motif) domain. RBM9 is thought to be a key regulator of alternative exon splicing in the nervous system and other cell types. RBM9 regulates the splicing activity of the highly conserved RNA 5'-UGCAUGU-3' element, an intron splicing enhancer that is often located adjacent to tissue-specific alternative exons. RBM9 prevents binding of U2AF65 (U2 snRNP auxiliary factor large subunit) to the 3' splice site of the RNA splicing element which affects alternative splicing of tissue-specific exons. RBM9 also interacts with the ER $\alpha$  (estrogen receptor  $\alpha$ ) transcription factor and regulates ER $\alpha$  transcriptional activity. Eight isoforms of RBM9 exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RBFOX2 (human) mapping to 22q12.3; Rbfox2 (mouse) mapping to 15 D3.

## SOURCE

RBM9 (G-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of RBM9 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86811 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

RBM9 (G-14) is recommended for detection of RBM9 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.

RBM9 (G-14) is also recommended for detection of RBM9 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RBM9 siRNA (h): sc-76371, RBM9 siRNA (m): sc-152756, RBM9 shRNA Plasmid (h): sc-76371-SH, RBM9 shRNA Plasmid (m): sc-152756-SH, RBM9 shRNA (h) Lentiviral Particles: sc-76371-V and RBM9 shRNA (m) Lentiviral Particles: sc-152756-V.

Molecular Weight of RBM9 isoforms 1-10: 38-47 kDa.

Positive Controls: Mouse brain extract: sc-2253, NIH/3T3 whole cell lysate: sc-2210 or Hep G2 cell lysate: sc-2227.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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](http://www.scbt.com) or our catalog for detailed protocols and support products.