SANTA CRUZ BIOTECHNOLOGY, INC.

RBM10 (H-4): sc-515548

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. RBM10 (RNA-binding protein 10), also known as GPATC9, MGC997, ZRANB5, GPATCH9 or RNA-binding protein S1-1, is a 930 amino acid nuclear protein that contains two RNA recognition motifs, a RanBP2-type zinc finger, a C_2H_2-type zinc finger and a G-patch domain. RBM10 binds to RNA homopolymers and may be involved in post-transcriptional processing, cancer proliferation and apoptosis. RBM10 may be significantly associated with the expression of the VEGF.

REFERENCES

1. Inoue, A., et al. 1996. Molecular cloning of a RNA binding protein, S1-1. Nucleic Acids Res. 24: 2990-2997.
2. Thiselton, D.L., et al. 2002. An integrated, functionally annotated gene map of the DXS8026-ELK1 interval on human Xp11.3-Xp11.23: potential hotspot for neurogenetic disorders. Genomics 79: 560-572.
3. Gläser, B., et al. 2004. Molecular cytogenetic analysis of a *de novo* balanced X;autosome translocation: evidence for predominant inactivation of the derivative X chromosome in a girl with multiple malformations. Am. J. Med. Genet. A 126A: 229-236.
4. Sutherland, L.C., et al. 2005. RNA binding motif (RBM) proteins: a novel family of apoptosis modulators? J. Cell. Biochem. 94: 5-24.

CHROMOSOMAL LOCATION

Genetic locus: RBM10 (human) mapping to Xp11.23.

SOURCE

RBM10 (H-4) is a mouse monoclonal antibody raised against amino acids 437-570 mapping within an internal region of RBM10 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-515548 X, 200 µg/0.1 ml.

RBM10 (H-4) is available conjugated to agarose (sc-515548 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515548 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515548 PE), fluorescein (sc-515548 FITC), Alexa Fluor® 488 (sc-515548 AF488), Alexa Fluor® 546 (sc-515548 AF546), Alexa Fluor® 594 (sc-515548 AF594) or Alexa Fluor® 647 (sc-515548 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515548 AF680) or Alexa Fluor® 790 (sc-515548 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

RBM10 (H-4) is recommended for detection of RBM10 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for RBM10 siRNA (h): sc-76362, RBM10 shRNA Plasmid (h): sc-76362-SH and RBM10 shRNA (h) Lentiviral Particles: sc-76362-V.

RBM10 (H-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of RBM10: 104 kDa.

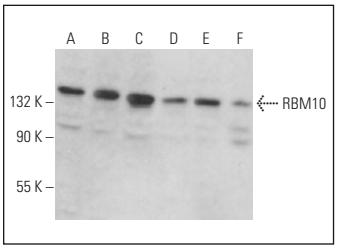
Molecular Weight (observed) of RBM10: 116-136 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

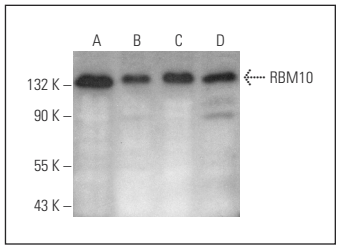
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RBM10 (H-4): sc-515548. Western blot analysis of RBM10 expression in K-562 (**A**), Daudi (**B**), IMR-32 (**C**), SW480 (**D**), CCRF-CEM (**E**) and SUP-T1 (**F**) whole cell lysates.



RBM10 (H-4): sc-515548. Western blot analysis of RBM10 expression in K-562 (**A**), THP-1 (**B**), HeLa (**C**) and Jurkat (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Nanjo, S., et al. 2022. Deficiency of the splicing factor RBM10 limits EGFR inhibitor response in EGFR-mutant lung cancer. J. Clin. Invest. 132: e145099.

STORAGE

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