

# RBMS1 (73-K2): sc-101190

## BACKGROUND

RBMS1 (RNA binding motif, single stranded interacting protein 1), also known as YC1, MSSP (c-Myc single strand binding protein), SCR2 (suppressor of Cdc2 with RNA binding motif), MSSP-1, MSSP-2 or MSSP-3, is a member of the MSSP family of proteins. The MSSP family is comprised of proteins that bind to single stranded DNA/RNA. Through an interaction with the c-Myc protein, members of this family are involved in a wide variety of cellular functions, including gene transcription, DNA replication, apoptosis and cell cycle progression. RBMS1, a nuclear localized protein, is expressed in lung, placenta and heart with highest expression levels during the G<sub>1</sub> to S transition phase of the cell cycle. RBMS1 contains two RNP domains, namely RNP1-A and RNP1-B, both of which are necessary for DNA binding. RBMS1 specifically binds to a catalytic subunit of DNA polymerase (pol)  $\alpha$  and stimulates its activity *in vitro*. Due to alternative splicing events, various isoforms exist for RBMS1.

## REFERENCES

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3. Negishi, Y., Nishita, Y., Saegusa, Y., Kakizaki, I., Galli, I., Kihara, F., Tamai, K., Miyajima, N., Iguchi-Ariga, S.M. and Ariga, H. 1994. Identification and cDNA cloning of single-stranded DNA binding proteins that interact with the region upstream of the human c-Myc gene. *Oncogene* 9: 1133-1143.
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5. Niki, T., Galli, I., Ariga, H. and Iguchi-Ariga, S.M. 2000. MSSP, a protein binding to an origin of replication in the c-Myc gene, interacts with a catalytic subunit of DNA polymerase  $\alpha$  and stimulates its polymerase activity. *FEBS Lett.* 475: 209-212.
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## CHROMOSOMAL LOCATION

Genetic locus: RBMS1 (human) mapping to 2q24.2; Rbms1 (mouse) mapping to 2 C1.2.

## SOURCE

RBMS1 (73-K2) is a mouse monoclonal antibody raised against recombinant RBMS1 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

RBMS1 (73-K2) is recommended for detection of RBMS1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RBMS1 siRNA (h): sc-94943, RBMS1 siRNA (m): sc-152757, RBMS1 shRNA Plasmid (h): sc-94943-SH, RBMS1 shRNA Plasmid (m): sc-152757-SH, RBMS1 shRNA (h) Lentiviral Particles: sc-94943-V and RBMS1 shRNA (m) Lentiviral Particles: sc-152757-V.

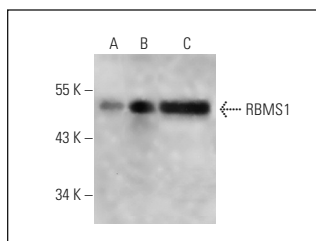
Molecular Weight of RBMS1: 50 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or RBMS1 (m): 293T Lysate: sc-127456.

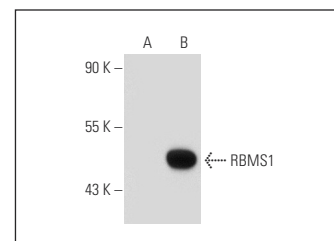
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



RBMS1 (73-K2): sc-101190. Western blot analysis of RBMS1 expression in non-transfected 293T: sc-117752 (A), mouse RBMS1 transfected 293T: sc-127456 (B) and HeLa (C) whole cell lysates.



RBMS1 (73-K2): sc-101190. Western blot analysis of RBMS1 expression in non-transfected: sc-117752 (A) and mouse RBMS1 transfected: sc-127457 (B) 293T whole cell lysates.

## 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) for detailed protocols and support products.