

# RBBP9 (2E5): sc-101111

## BACKGROUND

RBBP9 (retinoblastoma-binding protein 9), also known as BOG or RBBP10, is a 186 amino acid protein that localizes to both the nucleus and the cytoplasm. Expressed in a variety of tissues with higher expression in cancer cells, RBBP9 function as a retinoblastoma (Rb) binding protein that is thought to play a role in cell proliferation and differentiation events. Specifically, RBBP9 interacts with Rb and provides cellular resistance to the growth-inhibitory effects of TGF $\beta$ 1, thus facilitating the cellular transformation process. Due to its high expression level in cancer cells, RBBP9 may play a role in carcinogenesis and tumor formation. Two isoforms of RBBP9 exist due to alternative splicing events.

## REFERENCES

1. Yokota, J., et al. 1988. Altered expression of the retinoblastoma (RB) gene in small-cell carcinoma of the lung. *Oncogene* 3: 471-475.
2. Cheng, J., et al. 1990. Homozygous deletion of the retinoblastoma gene in an acute lymphoblastic leukemia (T) cell line. *Blood* 75: 730-735.
3. Voitach, J.T., et al. 1998. A retinoblastoma-binding protein that affects cell-cycle control and confers transforming ability. *Nat. Genet.* 19: 371-374.
4. Voitach, J.T., et al. 1999. Assignment of the Bog gene (RBBP9) to syntenic regions of mouse chromosome 2G1-H1 and human chromosome 20p11.2 by fluorescence *in situ* hybridization. *Cytogenet. Cell Genet.* 85: 252-253.
5. Chen, J.Z., et al. 2002. Cloning and expression of a novel retinoblastoma binding protein cDNA, RBBP10. *Biochem. Genet.* 40: 273-282.
6. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602908. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: RBBP9 (human) mapping to 20p11.23; Rbbp9 (mouse) mapping to 2 G1.

## SOURCE

RBBP9 (2E5) is a mouse monoclonal antibody raised against recombinant RBBP9 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

RBBP9 (2E5) is recommended for detection of RBBP9 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)], 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 RBBP9 siRNA (h): sc-76361, RBBP9 siRNA (m): sc-152720, RBBP9 shRNA Plasmid (h): sc-76361-SH, RBBP9 shRNA Plasmid (m): sc-152720-SH, RBBP9 shRNA (h) Lentiviral Particles: sc-76361-V and RBBP9 shRNA (m) Lentiviral Particles: sc-152720-V.

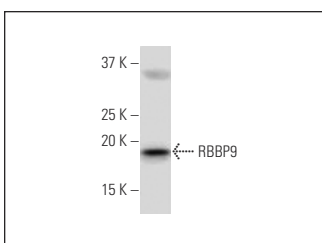
Molecular Weight of RBBP9: 21 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

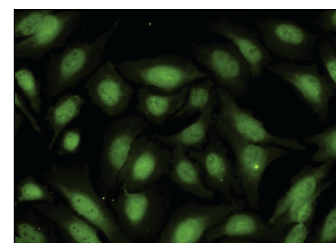
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



RBBP9 (2E5): sc-101111. Western blot analysis of RBBP9 expression in MCF7 whole cell lysate.



RBBP9 (2E5): sc-101111. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and cytoplasmic localization.

## SELECT PRODUCT CITATIONS

1. Pai, G., et al. 2023. Genome-wide siRNA screens identify RBBP9 function as a potential target in Fanconi anaemia-deficient head-and-neck squamous cell carcinoma. *Commun. Biol.* 6: 37.

## RESEARCH USE

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