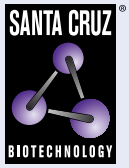
SANTA CRUZ BIOTECHNOLOGY, INC.

RBPMS (1C12): sc-293285



The Power to Question

BACKGROUND

RBPMS (RNA binding protein with multiple splicing), also known as HERMES, is a 196 amino acid protein that contains one RRM (RNA recognition motif) domain and belongs to the RRM family of RNA-binding proteins. Expressed ubiquitously, RBPMS exists as multiple alternatively spliced isoforms and is thought to bind RNA, possibly playing a role in RNA-related events, such as transcription and translation. The gene encoding RBPMS maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

CHROMOSOMAL LOCATION

Genetic locus: RBPMS (human) mapping to 8p12; Rbpms (mouse) mapping to 8 A4.

SOURCE

RBPMS (1C12) is a mouse monoclonal antibody raised against amino acids 1-219 representing full length RBPMS of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} 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 for detailed protocols and support products.

APPLICATIONS

RBPMS (1C12) is recommended for detection of RBPMS of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 RBPMS siRNA (h): sc-77460, RBPMS siRNA (m): sc-152764, RBPMS shRNA Plasmid (h): sc-77460-SH, RBPMS shRNA Plasmid (m): sc-152764-SH, RBPMS shRNA (h) Lentiviral Particles: sc-77460-V and RBPMS shRNA (m) Lentiviral Particles: sc-152764-V.

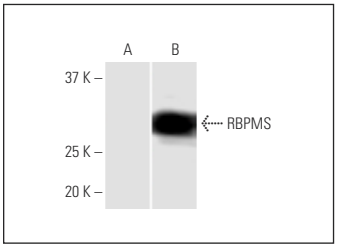
Molecular Weight of RBPMS isoforms: 24/22/17/16 kDa.

Positive Controls: RBPMS transfected 293T whole cell lysate.

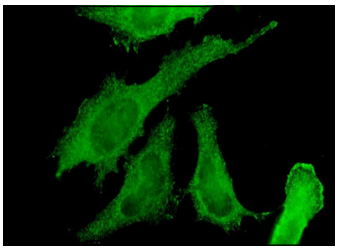
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



RBPMS (1C12): sc-293285. Western blot analysis of RBPMS expression in non-transfected (**A**) and RBPMS transfected (**B**) 293T whole cell lysates.



RBPMS (1C12): sc-293285. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

SELECT PRODUCT CITATIONS

1. Hou, N., et al. 2018. Inhibition of microRNA-21-3p suppresses proliferation as well as invasion and induces apoptosis by targeting RNA-binding protein with multiple splicing through Smad4/extra cellular signal-regulated protein kinase signalling pathway in human colorectal cancer HCT-116 cells. Clin. Exp. Pharmacol. Physiol. 45: 729-741.
2. Lam, J., et al. 2018. MiR-143/145 differentially regulate hematopoietic stem and progenitor activity through suppression of canonical TGFβ signaling. Nat. Commun. 9: 2418.
3. Gan, P., et al. 2022. RBPMS is an RNA-binding protein that mediates cardiomyocyte binucleation and cardiovascular development. Dev. Cell 57: 959-973.e7.
4. Hu, B., et al. 2022. Viability of mitochondria-labeled retinal ganglion cells in organotypic retinal explant cultures by two methods. Exp. Eye Res. 226: 109311.
5. Moustafa, A., et al. 2023. The MEF2A transcription factor interactome in cardiomyocytes. Cell Death Dis. 14: 240.
6. Gong, T.T., et al. 2024. SH3RF2 contributes to cisplatin resistance in ovarian cancer cells by promoting RBPMS degradation. Commun. Biol. 7: 67.

RESEARCH USE

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