

DESCRIPTION

Species Reactivity	Human
Specificity	Detects a peptide specific for human RBPMS around amino acid 150 in Direct ELISA.
Source	Monoclonal Mouse IgG ₁ Clone # 1090828
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic Peptide Accession # Q93062
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

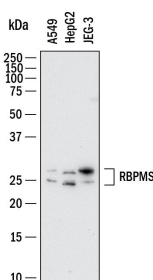
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	A549 human lung carcinoma cell line, HepG2 human hepatocellular carcinoma cell line and JEG-3 human epithelial choriocarcinoma cell line
Immunohistochemistry	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human testis

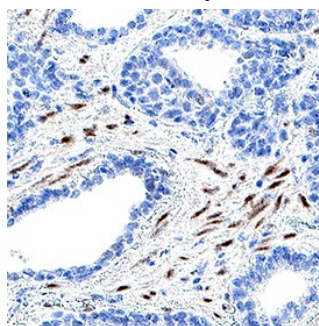
DATA

Western Blot



Detection of Human RBPMS by Western Blot. Western Blot shows lysates of A549 human lung carcinoma cell line, HepG2 human hepatocellular carcinoma cell line and JEG-3 human epithelial choriocarcinoma cell line. PVDF membrane was probed with 2 µg/ml of Mouse Anti-Human RBPMS Monoclonal Antibody (Catalog # MAB11670) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). Specific bands were detected for RBPMS at approximately 28, 32 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

Immunohistochemistry



Detection of RBPMS in Human Testis. RBPMS was detected in immersion fixed paraffin-embedded sections of human testis using Mouse Anti-Human RBPMS Monoclonal Antibody (Catalog # MAB11670) at 5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001) or the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nucleus and cytoplasm of smooth muscle. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

RPMS is a 22kDa protein that is a member of the RRM family of RNA-binding proteins. RPMS has been identified as a critical splicing regulator in differentiated vascular smooth muscle cells. RPMS is expressed at high levels in the heart, breasts, lungs, kidneys, stomach, muscles, liver, eyes, adipose tissue, and ovaries. Studies in breast cancer and ovarian cancer show that RPMS has a potential role as a tumor suppressor.

References:

1. Nakagaki-Silva EE, Gooding C, Llorian M, Jacob AG, Richards F, Buckroyd A, Sinha S, Smith CWJ. Identification of RPMS as a mammalian smooth muscle master splicing regulator via proximity of its gene with super-enhancers. *Elife*. 2019 Jul 8;8:e46327. doi: 10.7554/eLife.46327. PMID: 31283468; PMCID: PMC6613909.
2. Rabelo-Fernández RJ, Santiago-Sánchez GS, Sharma RK, Roche-Lima A, Carrion KC, Rivera RAN, Quiñones-Díaz BI, Rajasekaran S, Siddiqui J, Miles W, Rivera YS, Valiyeva F, Vivas-Mejia PE. Reduced RPMS Levels Promote Cell Proliferation and Decrease Cisplatin Sensitivity in Ovarian Cancer Cells. *Int J Mol Sci*. 2022 Jan 4;23(1):535. doi: 10.3390/ijms23010535. PMID: 35008958; PMCID: PMC8745614.