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# RBM14 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2957c

## Product Information

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| **Application** | WB, IHC-P, FC, E |
| **Primary Accession** | Q96PK6 |
| **Other Accession** | Q8C2Q3, Q5EA36 |
| **Reactivity** | Human |
| **Predicted** | Bovine, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB17295 |
| **Calculated MW** | 69492 |
| **Antigen Region** | 193-223 |

## Additional Information

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| **Gene ID** | 100526737;10432 |
| **Other Names** | RNA-binding protein 14, Paraspeckle protein 2, PSP2, RNA-binding motif protein 14, RRM-containing coactivator activator/modulator, Synaptotagmin-interacting protein, SYT-interacting protein, RBM14, SIP |
| **Target/Specificity** | This RBM14 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 193-223 amino acids from the Central region of human RBM14. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | RBM14 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | RBM14 |

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| **Synonyms** | SIP |
| **Function** | Isoform 1 may function as a nuclear receptor coactivator, enhancing transcription through other coactivators such as NCOA6 and CITED1. Isoform 2, functions as a transcriptional repressor, modulating transcriptional activities of coactivators including isoform 1, NCOA6 and CITED1 (PubMed:11443112). Regulates centriole biogenesis by suppressing the formation of aberrant centriolar protein complexes in the cytoplasm and thus preserving mitotic spindle integrity. Prevents the formation of the STIL-CPAP complex (which can induce the formation of aberrant centriolar protein complexes) by interfering with the interaction of STIL with CPAP (PubMed:25385835). Plays a role in the regulation of DNA virus-mediated innate immune response by assembling into the HDP-RNP complex, a complex that serves as a platform for IRF3 phosphorylation and subsequent innate immune response activation through the cGAS-STING pathway (PubMed:28712728). Also involved in the regulation of pre-mRNA alternative splicing (PubMed:37548402). |
| **Cellular Location** | Nucleus. Nucleus, nucleolus. Cytoplasm. Note=In punctate subnuclear structures often located adjacent to splicing speckles, called paraspeckles (PubMed:11790299). Cytoplasmic localization is crucial for its function in suppressing the formation of aberrant centriolar protein complexes (PubMed:25385835). |
| **Tissue Location** | Expressed in all tissues tested, including brain, heart, skeletal muscle, colon, thymus, spleen, kidney, liver, small intestine, placenta, lung and peripheral blood lymphocytes |

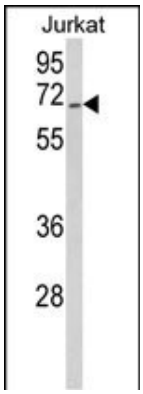
## Background

Isoform 1 may function as a nuclear receptor coactivator, enhancing transcription through other coactivators such as NCOA6 and CITED1. Isoform 2, functions as a transcriptional repressor, modulating transcriptional activities of coactivators including isoform 1, NCOA6 and CITED1.

## References

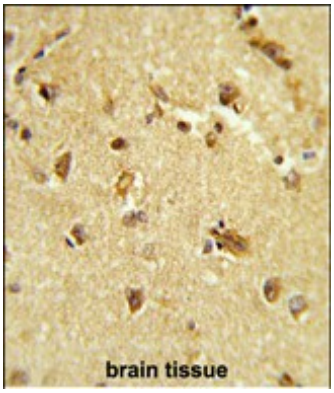
Andersen,J.S., et.al., Curr. Biol. 12 (1), 1-11 (2002)
Brett,D., et.al., Hum. Mol. Genet. 6 (9), 1559-1564 (1997)

## Images

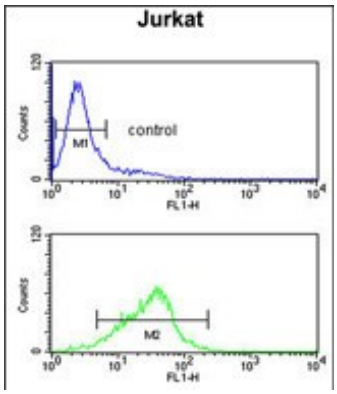



Western blot analysis of RBM14 Antibody (Center) (Cat. #AP2957c) in Jurkat cell line lysates (35ug/lane). RBM14 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded brain tissue reacted with RBM14 Antibody (Center), which was




peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.




RBM14 Antibody (Center) (Cat. #AP2957c) flow cytometric analysis of Jurkat cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.