

RBM14 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2957c

Specification

RBM14 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB, FC,E <u>Q96PK6</u> <u>Q8C2O3</u>, <u>O5EA36</u> Human Bovine, Mouse Rabbit Polyclonal Rabbit IgG 69492 193-223

RBM14 Antibody (Center) - Additional Information

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 IHC-P~~1:50~100 WB~~1:1000 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.

RBM14 Antibody (Center) - Protein Information



Name RBM14

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:<u>11443112</u>). 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:<u>25385835</u>). 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:<u>28712728</u>). Also involved in the regulation of pre-mRNA alternative splicing (PubMed:<u>37548402</u>).

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

RBM14 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RBM14 Antibody (Center) - 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.

RBM14 Antibody (Center) - 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.

RBM14 Antibody (Center) - 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)