

For Research Use Only

RRM1 Polyclonal antibody

Catalog Number: 10526-1-AP

Featured Product

51 Publications



Basic Information

Catalog Number:

10526-1-AP

Size:

150ul, Concentration: 400 ug/ml by Nanodrop and 220 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0789

GenBank Accession Number:

BC006498

GeneID (NCBI):

6240

UNIPROT ID:

P23921

Full Name:

ribonucleotide reductase M1

Calculated MW:

90 kDa

Observed MW:

90 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:600

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat, monkey

Cited Species:

human, mouse, xenopus

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: A431 cells, HeLa cells, A549 cells, K-562 cells, BxPC-3 cells, HEK-293 cells, U-251 cells

IP: K-562 cells,

IHC: human breast cancer tissue, human lung cancer tissue, human ovary tumor tissue

IF/ICC: HepG2 cells, Raji cells

Background Information

Ribonucleoside-diphosphate reductase functions as a heterodimer of a large and a small subunits in deoxyribonucleotide synthesis. RRM1 constitutes to the large subunit (R1) of ribonucleotide reductase, and it can either form heterodimer with small subunit RRM or RRM2B (PMID:16376858). RRM1 provides the precursors necessary for DNA synthesis. RRM1 can not be detected in quiescent cells, while its mRNA and protein are present throughout the cell cycle in cycling cells (PMID:8188248). Researches showed that RRM1 is involved in carcinogenesis, tumor progression, and the resistance of non-small-cell lung cancer (NSCLC) to treatment. Low level expression of RRM1 in NSCLC is associated with poor survival (PMID:17314339).

Notable Publications

Author	Pubmed ID	Journal	Application
Yukio Watanabe	25257380	Histopathology	IHC
Martin Kerr	25224279	Clin Cancer Res	WB
Csaba Tóth	28949378	Int J Mol Med	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

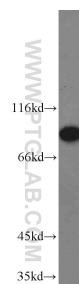
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

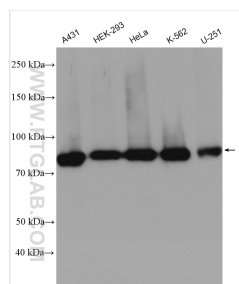
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

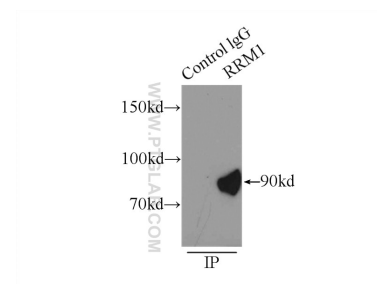
Selected Validation Data



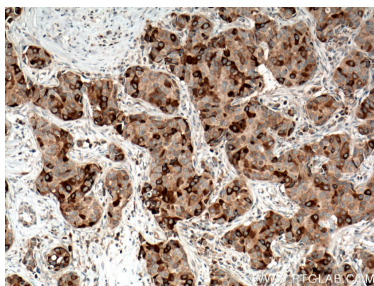
HeLa cells were subjected to SDS PAGE followed by western blot with 10526-1-AP (RRM1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



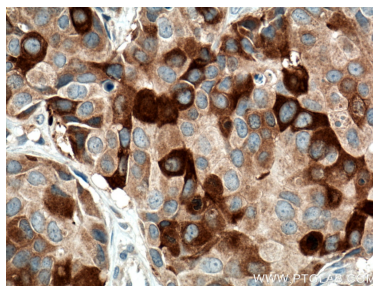
A431 cells were subjected to SDS PAGE followed by western blot with 10526-1-AP (RRM1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



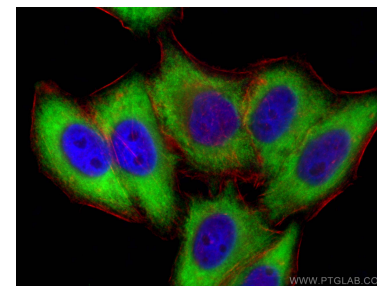
IP result of anti-RRM1 (IP:10526-1-AP, 5ug; Detection:10526-1-AP 1:800) with K-562 cells lysate 8000ug.



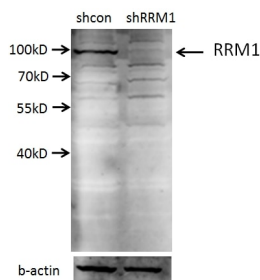
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10526-1-AP (RRM1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



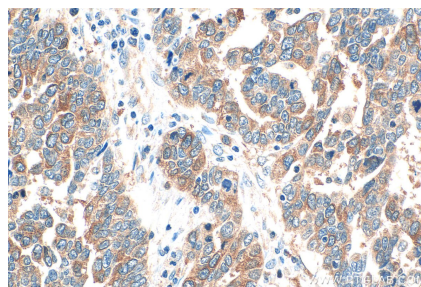
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10526-1-AP (RRM1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



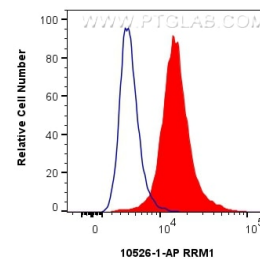
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using RRM1 antibody (10526-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



A549 cells (shcontrol and shRNA of RRM1) were subjected to SDS PAGE followed by western blot with 10526-1-AP (RRM1 antibody) at dilution of 1:2000. .



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 10526-1-AP (RRM1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10⁶ HeLa cells were intracellularly stained with 0.4 ug RRM1 Polyclonal antibody (10526-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).