For Research Use Only

RRM1 Polyclonal antibody

Catalog Number:10526-1-AP Featured Product 48 Publications

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Basic Information

Catalog Number:
10526-1-AP

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

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0789

GenBank Accession Number:
BC006498

GeneID (NCBI):
6240

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 1:50-1:500

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
IF, IHC, IP, WB

Species Specificity:
human, mouse, rat, monkey

Cited Species:
human, 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

IF : HepG2 cells, MCF-7 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

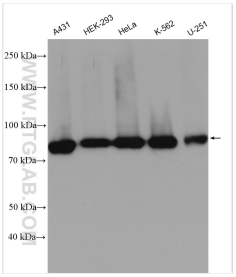
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

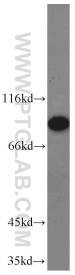
*** 20ul sizes contain 0.1% BSA

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

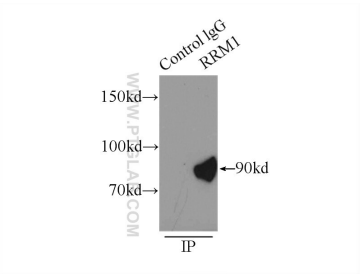
Selected Validation Data



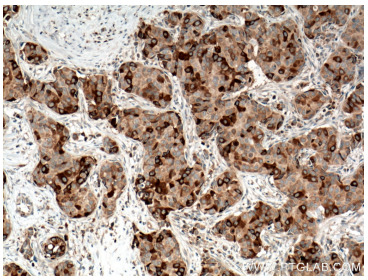
A431 cells were subjected to SDS PAGE followed by western blot with 10526-1-AP (RRM1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



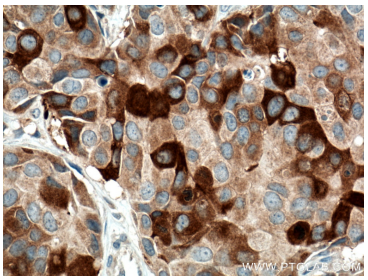
HeLa cells were subjected to SDS PAGE followed by western blot with 10526-1-AP (RRM1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



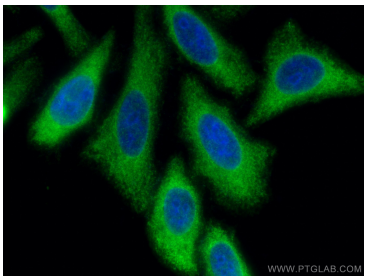
IP Result of anti-RRM1 (IP:10526-1-AP, 5ug; Detection:10526-1-AP 1:800) with K-562 cells lysate 8000ug.



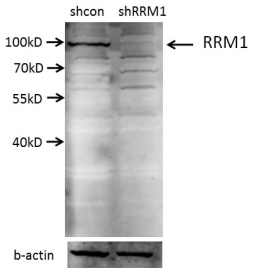
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10526-1-AP (RRM1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



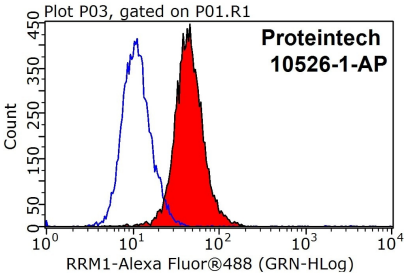
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10526-1-AP (RRM1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) 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).



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. .



1X10^6 HeLa cells were stained with .2ug RRM1 antibody (10526-1-AP, red) and control antibody (blue). Cells were fixed with 4% PFA and permeabilized with 0.1% Triton X-100. Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.