

For Research Use Only

# RRM1 Monoclonal antibody

Catalog Number: 60073-2-Ig

Featured Product

7 Publications



## Basic Information

<b>Catalog Number:</b> 60073-2-Ig	<b>GenBank Accession Number:</b> BC006498	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 2000 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 6240	<b>CloneNo.:</b> 5H6F3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P23921	<b>Recommended Dilutions:</b> WB: 1:1000-1:4000 IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC: 1:3000-1:8000 IF-P: 1:200-1:800 IF/ICC: 1:400-1:1600
<b>Isotype:</b> IgG2b	<b>Full Name:</b> ribonucleotide reductase M1	
<b>Immunogen Catalog Number:</b> AG0789	<b>Calculated MW:</b> 90 kDa	
	<b>Observed MW:</b> 90 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, IP, ELISA	<b>Positive Controls:</b> WB : K-562 cells, HeLa cells IP : K-562 cells, IHC : human breast cancer tissue, human colon cancer tissue, human lung cancer tissue, human pancreas cancer tissue, human urothelial carcinoma tissue IF-P : human breast cancer tissue, IF/ICC : HepG2 cells, HeLa cells
<b>Cited Applications:</b> WB, IHC, IF, IP	
<b>Species Specificity:</b> human	
<b>Cited Species:</b> human	

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

## 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
Toru Aoyama	28521448	Oncol Lett	IHC
Donghua Geng	35837166	J Gastrointest Oncol	WB
Sean G Rudd	31950591	EMBO Mol Med	WB

## 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

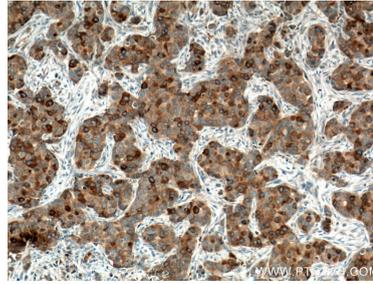
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

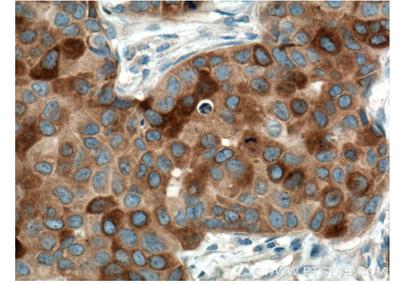
## Selected Validation Data



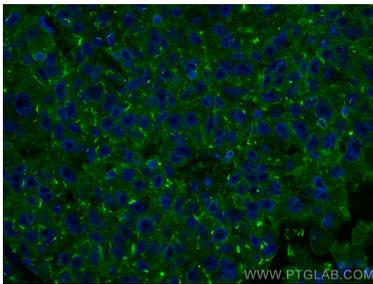
K-562 cells were subjected to SDS PAGE followed by western blot with 60073-2-Ig (RRM1 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



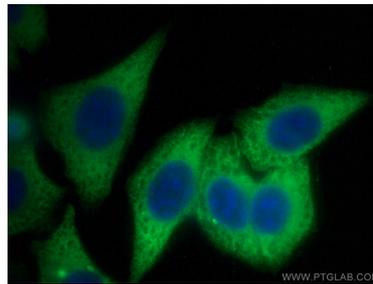
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60073-2-Ig (RRM1 antibody) at dilution of 1:5000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



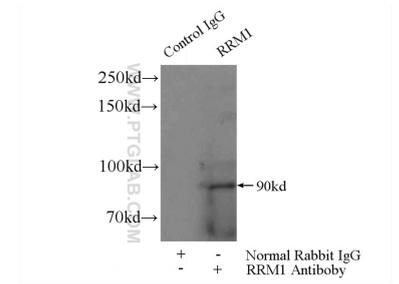
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60073-2-Ig (RRM1 antibody) at dilution of 1:5000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



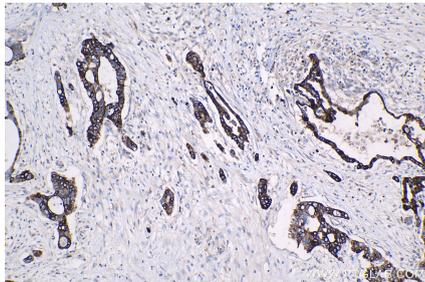
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using RRM1 antibody (60073-2-Ig, Clone: 5H6F3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using RRM1 antibody (60073-2-Ig, Clone: 5H6F3) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



IP result of anti-RRM1 (IP:60073-2-Ig, 5ug; Detection:60073-2-Ig 1:1000) with K-562 cells lysate 3440ug.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 60073-2-Ig (RRM1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).