For Research Use Only

RRM1 Monoclonal antibody

Catalog Number:60073-2-Ig Featured Product 6 Publications

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Basic Information

Catalog Number:
60073-2-Ig

Size:
150ul , Concentration: 2000 μg/ml by Nanodrop and 1000 μg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG2b

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:
Protein A purification

CloneNo.:
5H6F3

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB
IHC 1:3000-1:8000
IF 1:400-1:1600

Applications

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

Cited Applications:
IF, IHC, WB

Species Specificity:
human

Cited Species:
human

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 : K-562 cells, HeLa cells

IP : K-562 cells,

IHC : human breast cancer tissue, human lung cancer tissue, human urothelial carcinoma tissue, human colon cancer tissue, human pancreas cancer tissue

IF : HepG2 cells, HeLa cells, human breast cancer tissue

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

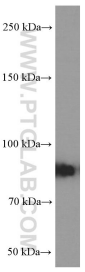
Storage

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

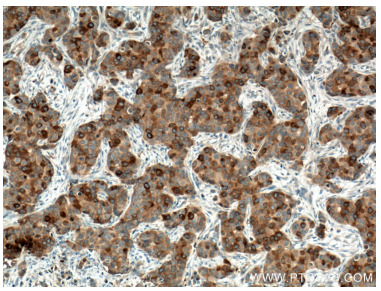
*** 20ul sizes contain 0.1% BSA

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

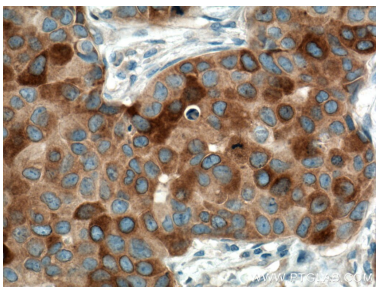
Selected Validation Data



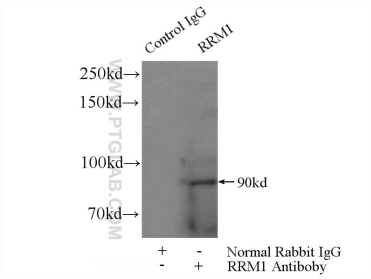
K-562 cells were subjected to SDS PAGE followed by western blot with 60073-2-Ig (RRM1 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



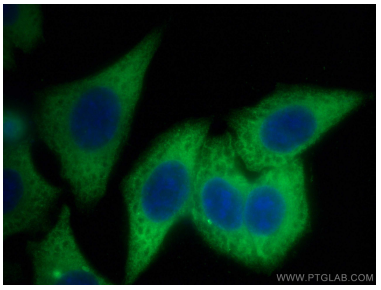
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60073-2-Ig (RRM1 antibody) at dilution of 1:5000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



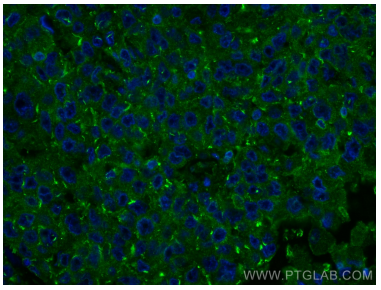
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60073-2-Ig (RRM1 antibody) at dilution of 1:5000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



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).



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).