

For Research Use Only

# B23/NPM1 Polyclonal antibody

Catalog Number: 10306-1-AP

Featured Product

43 Publications



## Basic Information

### Catalog Number:

10306-1-AP

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0286

### GenBank Accession Number:

BC002398

### GeneID (NCBI):

4869

### UNIPROT ID:

P06748

### Full Name:

nucleophosmin (nucleolar phosphoprotein B23, numatrin)

### Calculated MW:

33 kDa

### Observed MW:

35-40 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:20000-1:100000

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

IHC: 1:250-1:1000

IF/ICC: 1:400-1:1600

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ChIP

### Species Specificity:

human, rat

### Cited Species:

human, mouse, rat, pig

**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**: COLO 320 cells, Jurkat cells, multi-cells, K-562 cells, HeLa cells, HEK-293 cells

**IP**: Jurkat cells,

**IHC**: human colon cancer tissue, human breast cancer tissue, human normal colon

**IF/ICC**: HeLa cells,

## Background Information

Nucleophosmin (NPM1, B23) is a putative ribosome assembly factor with a high affinity for peptides containing nuclear localization signals (NLSs). The transport of proteins across the nuclear envelope is a selective, multistep process involving several cytoplasmic factors. Proteins must be recognized as import substrates, dock at the nuclear pore complex and translocate across the nuclear envelope in an ATP-dependent fashion. Several cytosolic and nuclear proteins that are central to this process have been identified. The 38 kDa nuclear protein nucleophosmin is involved in ribosomal assembly and rRNA transport. It is an abundant protein that is highly phosphorylated by Cdc2 kinase during mitosis.

## Notable Publications

| Author       | Pubmed ID | Journal         | Application |
|--------------|-----------|-----------------|-------------|
| Yinghua Zhao | 36238596  | Front Microbiol | IF          |
| Zhen Ding    | 32944812  | Virus Genes     | IF          |
| Masayuki Ide | 31657521  | EMBO Mol Med    |             |

## 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

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

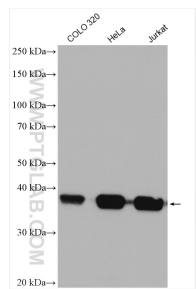
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

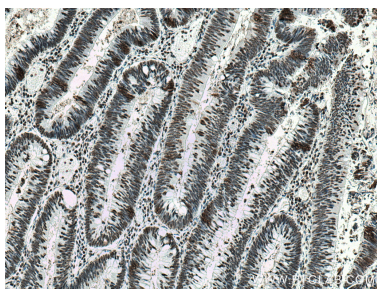
W: [ptgcn.com](http://ptgcn.com)

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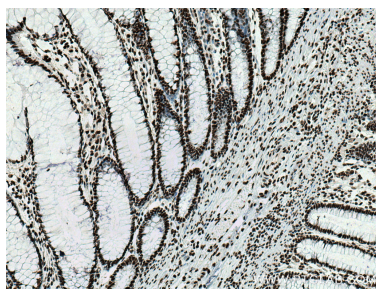
Selected Validation Data



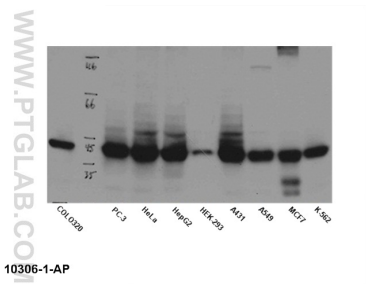
Various lysates were subjected to SDS PAGE followed by western blot with 10306-1-AP (B23/NPM1 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



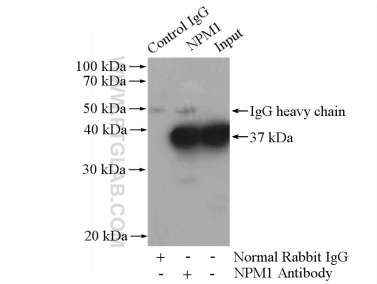
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10306-1-AP (B23/NPM1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



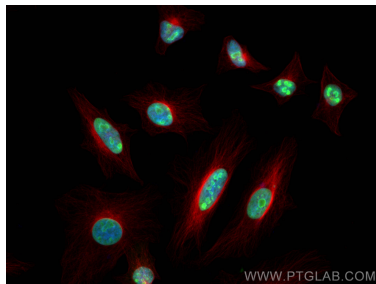
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10306-1-AP (B23/NPM1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



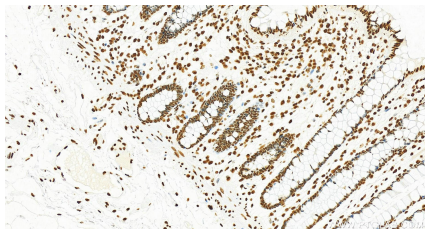
WB result of anti-NPM1 (10306-1-AP) in different cell lysates.



IP result of anti-B23/NPM1 (IP:10306-1-AP, 4ug; Detection:10306-1-AP 1:2000) with Jurkat cells lysate 3200ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using B23/NPM1 antibody (10306-1-AP) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).



Immunohistochemical analysis of paraffin-embedded normal colon slide using 10306-1-AP (B23/NPM1 antibody) at dilution of 1:10000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).