## For Research Use Only

# B23/NPM1 Polyclonal antibody

Catalog Number: 10306-1-AP

Featured Product

**40 Publications** 



### **Basic Information**

Catalog Number:

10306-1-AP

Size:

GenBank Accession Number:

BC002398

GeneID (NCBI):

150ul , Concentration: 500 ug/ml by

Nanodrop: **UNIPROT ID:** P06748 Rabbit Full Name:

Isotype: nucleophosmin (nucleolar phosphoprotein B23, numatrin) IgG

Immunogen Catalog Number: Calculated MW: AG0286

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: 1:50-1:500

# **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  $involved\ in\ ribosomal\ assembly\ and\ rRNA\ transport.\ It\ is\ an\ abundant\ protein\ that\ is\ highly\ phosphory lated\ by\ Cdc2$ 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.

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

Aliquoting is unnecessary for -20°C storage

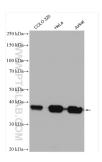
\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact: T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free E: proteintech@ptglab.com

in USA), or 1(312) 455-8498 (outside USA) 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



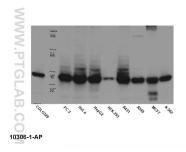
Various lysates were subjected to SDS PAGE followed by western blot with 10306-1-AP (B23/NPM1 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



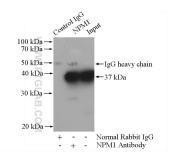
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10306-1-AP (B23/NPM1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



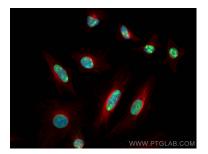
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 10306-1-AP (B23/NPM1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



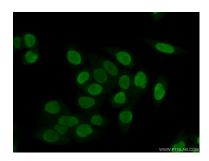
WB result of anti-NPM1 (10306-1-AP) in different cell lysates.



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 Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 10306-1-AP (B23 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffinembedded 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).