For Research Use Only

B23/NPM1 Polyclonal antibody

Catalog Number:10306-1-AP Featured Product 27 Publications

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Basic Information

Catalog Number:
10306-1-AP

Size:
500 μg/ml

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 1:50-1:500

Applications

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

Cited Applications:
chIP, CoIP, IF, IHC, IP, WB

Species Specificity:
human, rat

Cited Species:
human, mouse, 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

IF : 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

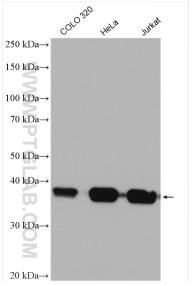
Author	Pubmed ID	Journal	Application
Yinghua Zhao	36238596	Front Microbiol	IF
Zhen Ding	32944812	Virus Genes	IF
Masayuki Ide	31657521	EMBO Mol Med	

Storage

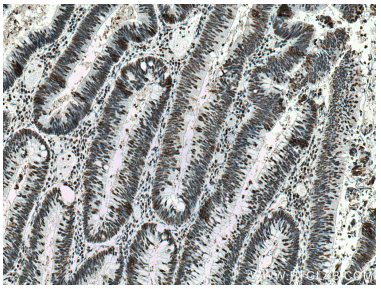
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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).

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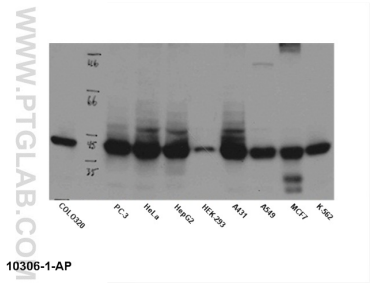
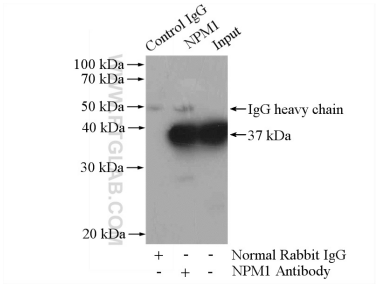
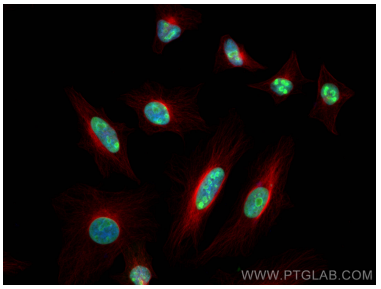


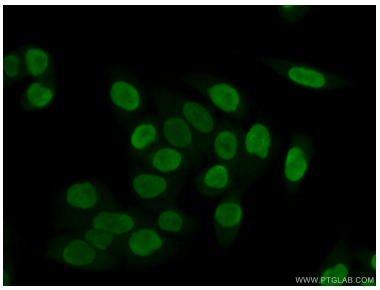
WB result of anti-NPM1 (10306-1-AP) in different cell lysates.



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).



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