

For Research Use Only

B23/NPM1 Monoclonal antibody

Catalog Number: 60096-1-Ig

Featured Product

28 Publications



Basic Information

Catalog Number: 60096-1-Ig	GenBank Accession Number: BC002398	Purification Method: Protein A purification
Size: 150ul, Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 4869	CloneNo.: 4F12A3
Source: Mouse	Full Name: nucleophosmin (nucleolar phosphoprotein B23, numatrin)	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:200-1:1000 IF 1:200-1:800
Isotype: IgG1	Calculated MW: 33 kDa	
Immunogen Catalog Number: AG7415	Observed MW: 35-38 kDa	

Applications

Tested Applications:
IF, IHC, WB, ELISA

Cited Applications:
IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse

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: HSC-T6 cells, HepG2 cells, LNCaP cells, HeLa cells, RAW 264.7 cells, ROS1728 cells, NIH/3T3 cells, C6 cells, HEK-293 cells, Jurkat cells, K-562 cells, MCF-7 cells

IHC: human breast cancer tissue, human colon cancer tissue

IF: HepG2 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
Shutong Fan	30405806	Oncol Lett	IHC
Qingyang Zhang	34551807	Mol Neurodegener	WB, IF
Jie Shi	36316314	Cell Death Discov	IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

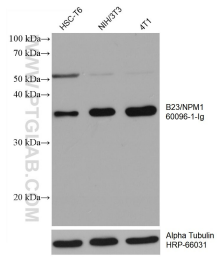
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

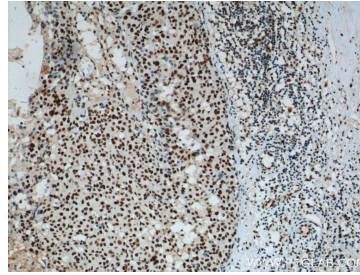
E: proteintech@ptglab.com
W: ptglab.com

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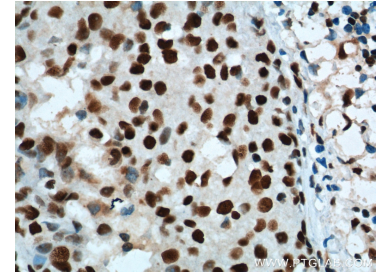
Selected Validation Data



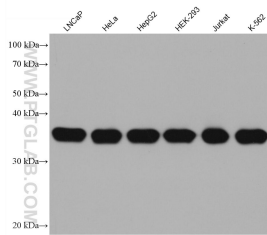
Various lysates were subjected to SDS PAGE followed by western blot with 60096-1-Ig (B23/NPM1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



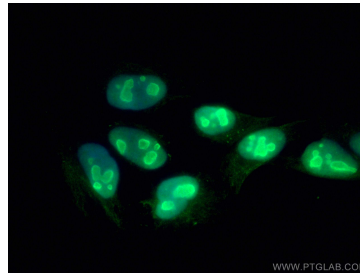
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60096-1-Ig (B23 Antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60096-1-Ig (B23 Antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 60096-1-Ig (B23/NPM1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using B23/NPM1 antibody (60096-1-Ig, Clone: 4F12A3) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).