For Research Use Only

B23/NPM1 Monoclonal antibody

Catalog Number:60096-1-lg Featured Product

28 Publications



Basic Information

Catalog Number: 60096-1-lg Size: 1000 µg/ml

Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG7415

GenBank Accession Number: BC002398

GeneID (NCBI): 4869 **UNIPROT ID:** P06748 Full Name:

nucleophosmin (nucleolar phosphoprotein B23, numatrin)

Calculated MW: 33 kDa Observed MW:

35-38 kDa

Purification Method:

Protein A purification

CloneNo.: 4F12A3

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:200-1:1000 IF 1:200-1:800

Applications

Tested Applications: IF/ICC, 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

IHC: human breast cancer tissue, human colon cancer

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

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

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

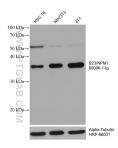
Aliquoting is unnecessary for -20°C storage

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

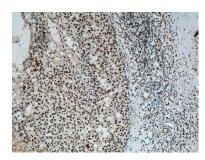
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

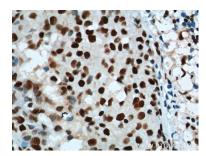
Selected Validation Data



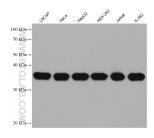
Various lysates were subjected to SDS PAGE followed by western blot with 60096-1-lg (B23/NPM1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



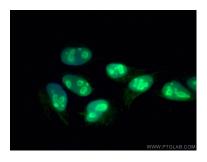
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 60096-1-lg (B23 Antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 60096-1-lg (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-lg (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).