

## Nucleophosmin (Acute Myeloid Leukemia Marker) Antibody

Mouse Monoclonal Antibody [Clone NPM1/3287]

Catalog No	Format	Size
4869-MSM7-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4869-MSM7-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4869-MSM7-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

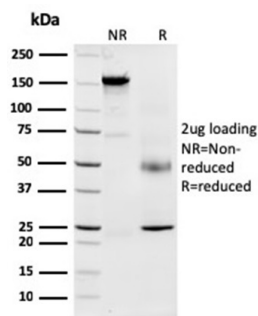
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

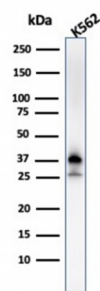
<b>Clone</b>	NPM1/3287
<b>Gene Name</b>	NPM1
<b>Immunogen</b>	Recombinant fragment (around aa185-287) of human NPM1 protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b / Kappa
<b>Mol. Weight of Antigen</b>	33kDa
<b>Cellular Localization</b>	Centrosome, Cytoplasm, Cytoskeleton, Microtubule organizing center, Nucleolus, Nucleoplasm, Nucleus
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	HeLa or A431 cells. Human skin or colon tissue (IHC)., K562, MCF-7

\*Optimal dilution for a specific application should be determined.

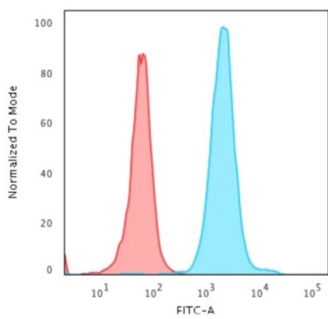
### Product Images for Nucleophosmin (Acute Myeloid Leukemia Marker) Antibody



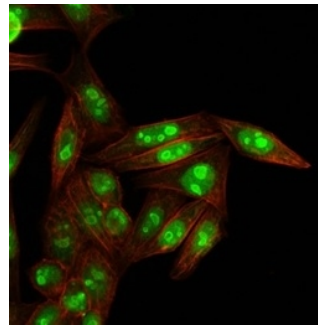
SDS-PAGE Analysis Purified Nucleophosmin Mouse Monoclonal Antibody (NPM1/3287). Confirmation of Integrity and Purity of Antibody.



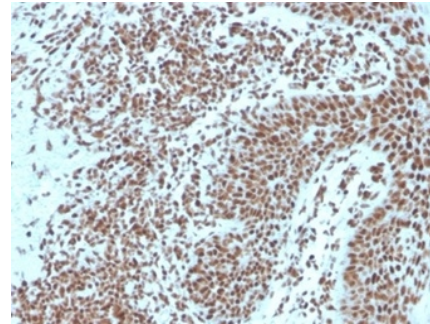
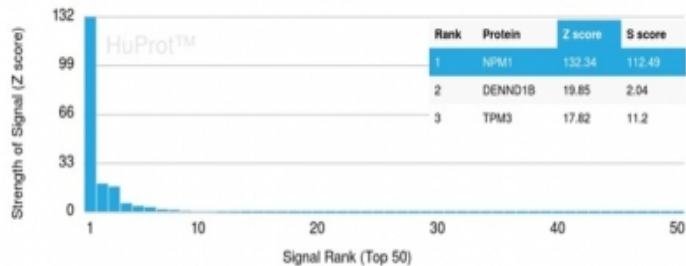
Western Blot Analysis of K562 cell lysate using Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3287).



Flow Cytometric Analysis of PFA-fixed HeLa cells using Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3287) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Immunofluorescence staining of HeLa cells using Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3287) followed by GAM IgG-CF488 (green). Membrane stained with phalloidin (red).



Formalin-fixed, paraffin-embedded human Basal Cell Carcinoma stained with Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3287).

Analysis of Protein Array containing more than 19,000 full-length human proteins using Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3287) Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

### Specificity & Comments

Recognizes a 33kDa glycoprotein, identified as Nucleophosmin (NPM). It is predominantly localized in the nucleus of cells in most tissues. NPM is involved in ribosomal assembly and rRNA transport. It is an abundant protein that is highly phosphorylated by Cdc2 kinase during mitosis. This phosphoprotein moves between the nucleus and the cytoplasm. It is thought to be involved in several processes including regulation of the ARF/p53 pathway. A number of genes are fusion partners, in particular the anaplastic lymphoma kinase gene on chromosome 2. Mutations in exon 12 affecting the C-terminus of the protein are associated with an aberrant cytoplasmic location. Mutations in this gene are associated with acute myeloid leukemia. The antibody may be a useful aid for classification of acute myeloid leukemia.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Infectious Disease, Transcription Factors