

## Nucleolin (Marker of Human Cells) Antibody

Mouse Monoclonal Antibody [Clone SPM614]

Catalog No	Format	Size
4691-MSM1X-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4691-MSM1X-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4691-MSM1X-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

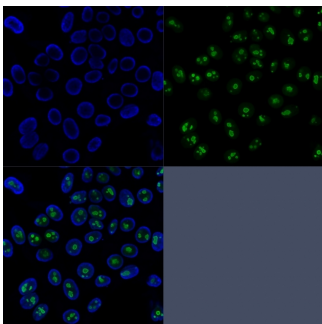
Applications	Tested Dilution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling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

### Product Details

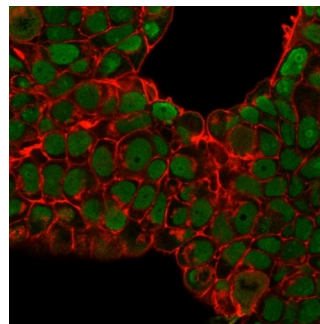
<b>Clone</b>	SPM614
<b>Gene Name</b>	NCL
<b>Immunogen</b>	Recombinant full-length human NCL protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	76kDa
<b>Cellular Localization</b>	Cytoplasm, Nucleolus, Nucleus
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	All human cells. Human testis, endometrial or Hodgkin s lymphoma., ovary, Uterus

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

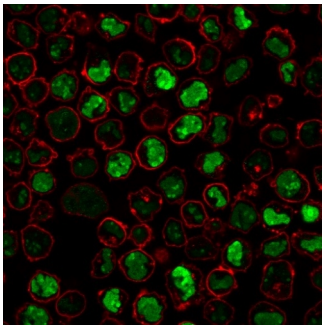
### Product Images for Nucleolin (Marker of Human Cells) Antibody



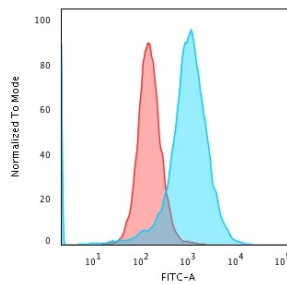
Immunofluorescence analysis of HeLa cells stained with CF647R-Nucleolin Mouse Monoclonal Antibody (SPM614) (green). Nuclei counterstained with DAPI (blue).



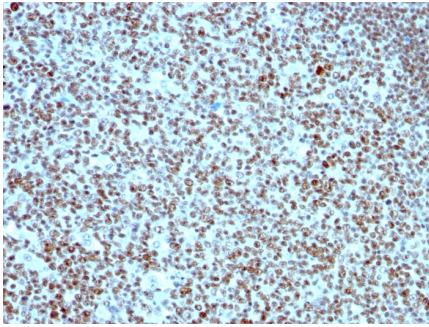
Immunofluorescence analysis of PFA-fixed MCF-7 cells. Nucleolin Mouse Monoclonal Antibody (SPM614) followed by goat anti-mouse IgG-CF488 (green). Membrane stained with phalloidin-CF640.



Immunofluorescence analysis of PFA-fixed K562 cells stained with Nucleolin Mouse Monoclonal Antibody (SPM614) followed by goat anti-mouse IgG-CF488 (green). Membrane stained with phalloidin-CF640.



Flow Cytometric Analysis of PFA-fixed K562 cells labeled with Nucleolin Mouse Monoclonal Antibody (SPM614) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Formalin-fixed, paraffin-embedded human tonsil stained with Nucleolin Mouse Monoclonal Antibody (SPM614).

### Specificity & Comments

Recognizes a protein of ~76kDa, which is identified as Nucleolin (NCL). It is the major nucleolar phosphoprotein of growing eukaryotic cells. NCL is located mainly in dense fibrillar regions of the nucleolus. It is found associated with intranucleolar chromatin and pre-ribosomal particles. Human NCL gene consists of 14 exons with 13 introns and spans approximately 11kb. It induces chromatin decondensation by binding to histone H1. It is thought to play a role in pre-rRNA transcription and ribosome assembly. This MAb can be used to stain the nucleoli in cell or tissue preparations and can be used as a marker of the nucleoli in subcellular fractions. It produces a speckled pattern in the nuclei of cells of normal and malignant cells and may be used to stain the nucleoli of cells in fixed or frozen tissue sections. It can be used with paraformaldehyde fixed frozen tissue or cell preparations and formalin fixed, paraffin-embedded tissue sections.

### 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

Cardiovascular, Nuclear Marker