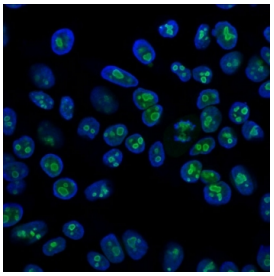
Anti-Nucleolin Antibody [clone SPM614] (V2756)

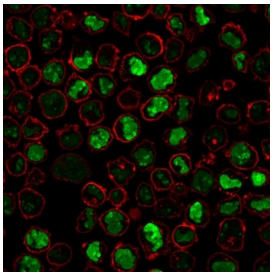
Catalog No.	Formulation	Size
V2756-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2756-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2756SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2756IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

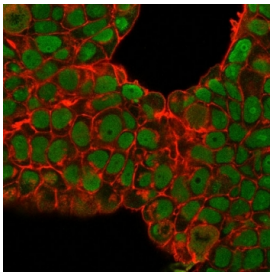
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM614
Purity	Protein G affinity chromatography
UniProt	P19338
Localization	Nucleoli
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-4ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This anti-Nucleolin antibody is available for research use only.



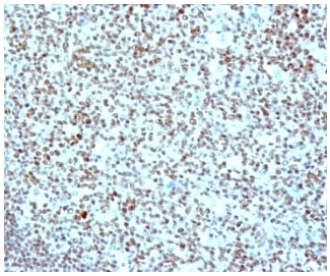
Immunofluorescent staining of PFA-fixed human HeLa cells with anti-Nucleolin antibody (clone SPM614, green) and DAPI (blue).



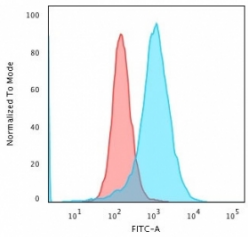
Immunofluorescent staining of PFA-fixed human K562 cells with anti-Nucleolin antibody (clone SPM614, green) and Phalloidin (red).



Immunofluorescent staining of PFA-fixed human MCF7 cells with anti-Nucleolin antibody (clone SPM614, green) and Phalloidin (red).



IHC: Formalin-fixed, paraffin-embedded human tonsil stained with anti-Nucleolin antibody (clone SPM614).



Flow cytometry testing of PFA fixed human K562 cells with anti-Nucleolin antibody (clone SPM614); Red=isotype control, Blue= anti-Nucleolin antibody.

Description

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.

Application Notes

Optimal dilution of the anti-Nucleolin antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if

required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human protein was used as the immunogen for the anti-Nucleolin antibody.

Storage

Store the anti-Nucleolin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).