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Nucleolin (Marker of Human Cells) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone 364-5 + NCL/902]
Catalog # AH11987

Product Information

Application	WB, IHC, IF, FC
Primary Accession	P19338
Other Accession	4691, 79110
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG's
Clone Names	364-5 + NCL/902
Calculated MW	76614

Additional Information

Gene ID	4691
Other Names	Nucleolin, Protein C23, NCL
Application Note	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Nucleolin (Marker of Human Cells) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NCL
Function	Nucleolin is the major nucleolar protein of growing eukaryotic cells. It is found associated with intranucleolar chromatin and pre-ribosomal particles. It induces chromatin decondensation by binding to histone H1. It is thought to play a role in pre-rRNA transcription and ribosome assembly. May play a role in the process of transcriptional elongation. Binds RNA oligonucleotides with 5'-UUAGGG- 3' repeats more tightly than the telomeric single-stranded DNA 5'- TTAGGG-3' repeats.
Cellular Location	Nucleus, nucleolus. Cytoplasm. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs

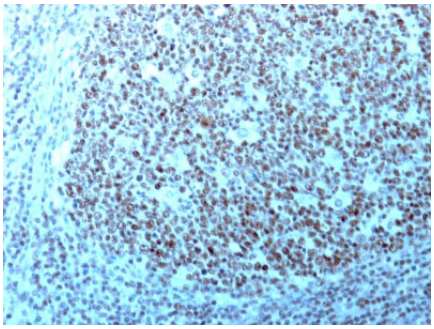
Background

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.

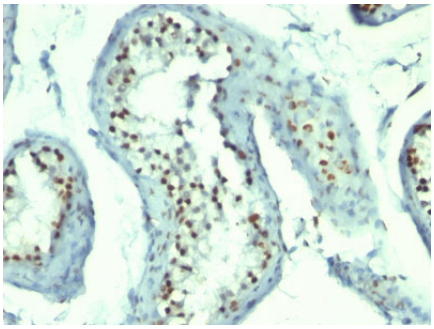
References

Fujiki H, Watanabe T, Suganuma M. Cell-surface nucleolin acts as a central mediator for carcinogenic, anti-carcinogenic, and disease-related ligands. J Cancer Res Clin Oncol. 2014;140(5):689-99. | Qiu W, Zhou F, Zhang Q, Sun X, Shi X, Liang Y, Wang X, Yue L. Overexpression of nucleolin and different expression sites both related to the prognosis of gastric cancer. APMIS. 2013;121(10):919-25.

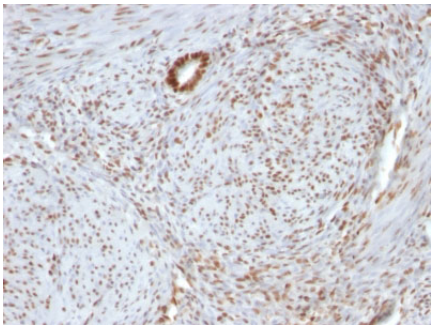
Images



Formalin-fixed, paraffin-embedded human Tonsil stained with Nucleolin Monoclonal Antibody (364-5 + NCL/902

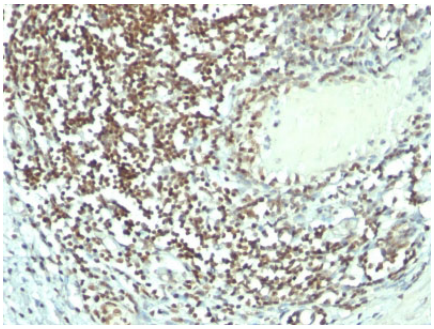


Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with Nucleolin Monoclonal Antibody (364-5 + NCL/902).

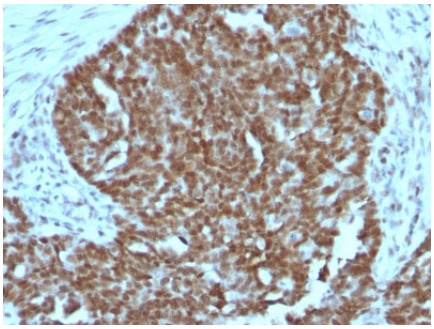


Formalin-fixed, paraffin-embedded human Uterus stained with Nucleolin Monoclonal Antibody (364-5 + NCL/902).

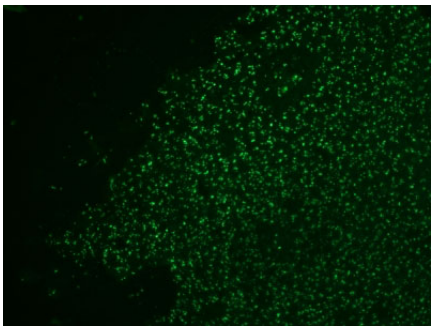
Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with Nucleolin Monoclonal Antibody



(364-5 + NCL/902).



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with Nucleolin Monoclonal Antibody (364-5 + NCL/902).



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with AF488 Conjugate of Nucleolin Monoclonal Antibody (364-5 + NCL/902).