

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

Mouse Monoclonal Antibody [Clone NCL/902] Catalog # AH11978

Product Information

| Application | WB, IHC, IF, FC |
|-------------------|-------------------------------------|
| Primary Accession | <u>P19338</u> |
| Other Accession | <u>4691</u> , <u>79110</u> Human |
| Reactivity | |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG1, kappa |
| Clone Names | 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 |

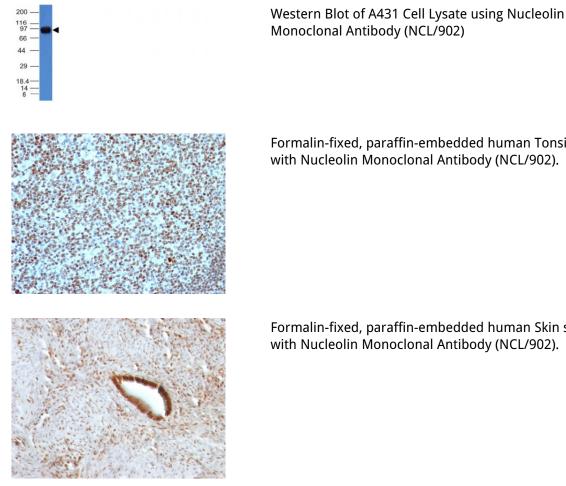
Background

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. IThis 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.

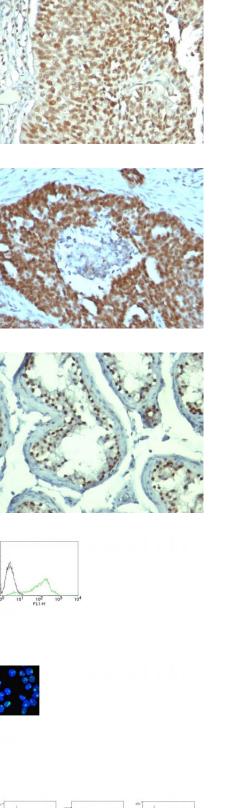
Images



Formalin-fixed, paraffin-embedded human Tonsil stained with Nucleolin Monoclonal Antibody (NCL/902).

Formalin-fixed, paraffin-embedded human Skin stained with Nucleolin Monoclonal Antibody (NCL/902).

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



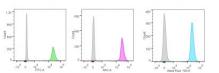
Formalin-fixed, paraffin-embedded human Bladder carcinoma stained with Nucleolin Monoclonal Antibody (NCL/902).

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

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

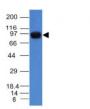


Flow Cytometry of Human Nucleolin Ag on 293T Cells. Black: Cells alone; Grey: Isotype Control; Green: AF488-labeled Nucleolin Monoclonal Antibody (NCL/902).



HeLa Cells stained with AF488 labeled Nucleolin Monoclonal Antibody (NCL/902) Green: AF488-labeled Ab. Blue: DAPI.

Flow Cytometry of Human Nucleolin Ag on Jurkat Cells. Grey: Isotype Control; Green: FITC-labeled; Purple: APC-Labeled; Turcoise: AF700-Labeled Nucleolin Monoclonal Antibody (NCL/902).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.