abcam

ab216006

Anti-Nucleolin antibody [NCL/902] - BSA and Azide free

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human NCL. Database link P19338
Carrier free	Yes
Clone number	NCL/902
Purification technique	Affinity purification Protein G
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	0.5-1 µg/mL

Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Not recommended

Species	Mouse
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Rat
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Cow
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Cynomolgus monkey
Dilution info	-
Notes	-

Species	Orangutan
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells
Notes	-

Not recommended

Species	Mouse, Rat, Cow, Cynomolgus monkey, Orangutan
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	0.5-1 µg/mL
Notes	-

Not recommended

Species	Mouse, Rat, Cow, Cynomolgus monkey, Orangutan
Dilution info	-
Notes	-

Target data

See full target information 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.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Nucleolin also known as C23 is a multifunctional protein mainly found in the nucleolus with a molecular weight of approximately 100 kDa. It plays a mechanical role in ribosomal RNA (rRNA) synthesis and ribosome biogenesis. Nucleolin is widely expressed in proliferating cells including HeLa culture and shows higher expression in cancer cells compared to normal cells. The nucleolin protein is involved in various nucleolar processes like the modulation of chromatin structure and nucleocytoplasmic transport.
Biological function summary	The nucleolin molecular weight protein contributes to regulating cellular processes such as chromatin remodeling rRNA transcription and mRNA stability. Nucleolin often forms complexes with various other proteins and nucleic acids enhancing its functionality within the cell nucleus. Its participation in processes like DNA replication and cell proliferation shows the central role nucleolin plays at the cellular level. It influences cellular responses by binding directly to specific RNA or DNA sequences.
Pathways	The nucleolin protein engages in major cellular pathways such as the RNA processing and p53 signaling pathways. Through the RNA processing pathway it interacts with proteins like fibrillarin to assist in rRNA maturation. Moreover within the p53 signaling pathway nucleolin regulates the activity of the tumor suppressor protein p53 impacting cell cycle progression and apoptosis. These interactions highlight nucleolin's role in maintaining cellular homeostasis and response to stress.
Associated diseases and disorders	The nucleolin protein often shows altered expression in cancers and cardiovascular diseases. In cancer nucleolin's high expression levels correlate with tumor progression and metastasis making it a potential target for cancer therapies. In cardiovascular diseases nucleolin interacts with proteins like VEGF to influence angiogenesis which affects disease progression. Understanding nucleolin's involvement in these diseases provides insight into potential therapeutic targets and interventions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

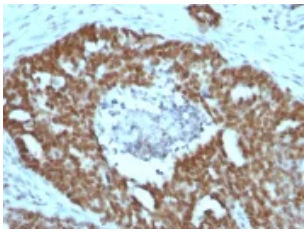
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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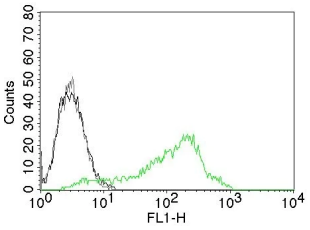
8 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

Nucleolin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Nucleolin antibody

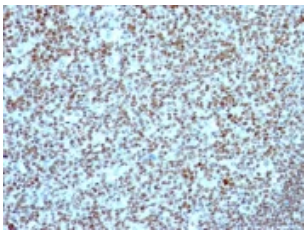
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human bladder carcinoma tissue labeling Nucleolin with ab216006 at 1 µg/ml dilution.



Flow Cytometry - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

Nucleolin Flow Cytometry staining using mouse Anti-Nucleolin antibody

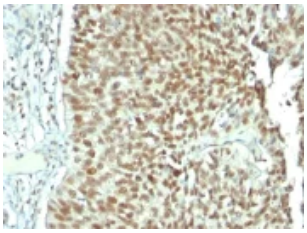
Flow Cytometric analysis of HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cells labeling Nucleolin with ab216006 at 1 ug/million cells. Black: cells alone; Grey: Isotype control; Green: AF488-labeled ab216006.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

Nucleolin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Nucleolin antibody

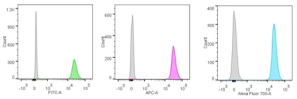
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human tonsil tissue labeling Nucleolin with ab216006 at 1 µg/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

Nucleolin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Nucleolin antibody

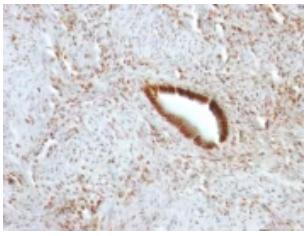
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human uterus tissue labeling Nucleolin with ab216006 at 1 µg/ml dilution.



Flow Cytometry - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

Nucleolin Flow Cytometry staining using mouse Anti-Nucleolin antibody

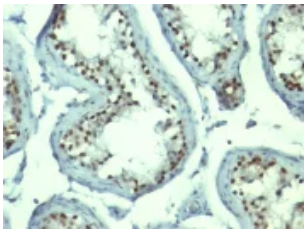
Flow Cytometric analysis of Jurkat (Human T cell leukemia cell line from peripheral blood) cells labeling Nucleolin with ab216006 at 1 ug/million cells. Grey: Isotype control; Green: FITC-labeled; Purple: APC-labeled; Turquoise: AF700-labeled ab216006.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

Nucleolin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Nucleolin antibody

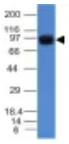
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human skin tissue labeling Nucleolin with ab216006 at 1 µg/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

Nucleolin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Nucleolin antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human ovarian carcinoma tissue labeling Nucleolin with ab216006 at 1 µg/ml dilution.



Western blot - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006)

All lanes:
Western blot - Anti-Nucleolin antibody [NCL/902] - BSA and Azide free (ab216006) at 1 µg/mL

All lanes:
A431 cell lysate

Predicted band size: 76 kDa

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