abcam

ab215396

Anti-Nuclear Antigen antibody [NM106] - Nuclear Marker

Lab Essentials

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Nuclei of HL60 cells.
Clone number	NM106
Purification technique	Affinity purification Protein G
Light chain type	kappa
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	ab215396 was purified from Bioreactor Concentrate by Protein A/G.

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	1-2 µg/mL
Notes	(Primary incubation for 30 minutes at RT). Perform heat mediated antigen retrieval with 10mM Tris with 1mM EDTA, pH 9, for 45 min at 95°C followed by cooling at RT for 20 minutes before commencing with IHC staining protocol. Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Species	Rat
Dilution info	1-2 µg/mL
Notes	(Primary incubation for 30 minutes at RT). Perform heat mediated antigen retrieval with 10mM Tris with 1mM EDTA, pH 9, for 45 min at 95°C followed by cooling at RT for 20 minutes before commencing with IHC staining protocol. Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Not recommended

Species	Pig
Dilution info	-
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Expected

Species	Rat

Dilution info	1-2 µg/mL
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Pig
Dilution info	-
Notes	-

Flow Cyt

Expected

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

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Pig

Dilution info	-
Notes	-

Target data

See full target information Human Nuclear Antigen

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	Nuclear Antigen often also referred to as the nuclear antigen (NA) or nuclear matrix protein performs important mechanical roles within the cell nucleus. The protein has an approximate mass of around 120 kDa and mostly localizes within the nuclear compartment of cells. Researchers have observed that Nuclear Antigen binds tightly to chromatin and plays a part in maintaining nuclear integrity and organization. This target shows expression in proliferative tissues and is linked with cell cycle regulation.
Biological function summary	Nuclear Antigen provides critical involvement in DNA replication and repair processes. It serves as a scaffold within the nucleus facilitating interactions between DNA and various nuclear enzymes. Nuclear Antigen acts as part of the nuclear matrix complex supporting cellular processes that maintain genomic stability. By modulating the structure of chromatin Nuclear Antigen influences gene expression and cell proliferation making it a noteworthy player in regulating cellular growth.
Pathways	The Nuclear Antigen influences cellular processes like cell cycle control and apoptosis. It interacts closely with pathways including the DNA damage response

	pathway and cell cycle checkpoints. Within these pathways its interaction with proteins such as p53 and BRCA1 is of particular importance. These interactions assist in the coordination of repair mechanisms during DNA damage events ensuring proper cell cycle progression and preventing genomic instability.
Associated diseases and disorders	Studies link Nuclear Antigen to specific types of cancer and autoimmune diseases. Its association with cancer comes from its role in cell cycle regulation as its altered expression is seen in several tumor types. Conversely in autoimmune disorders Elevated nuclear antigen expression levels can elicit autoimmune reactions suggesting their significant role. Here the protein interacts with disease-related molecules such as oncogenes in cancer or autoantibodies in autoimmune conditions highlighting its contribution to disease mechanisms.

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

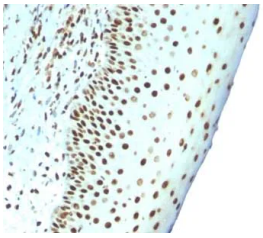
We do not recommend this combination. It is not covered by our product promise.

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.

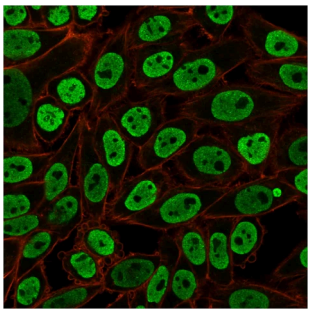
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nuclear Antigen antibody [NM106] - Nuclear Marker (ab215396)

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

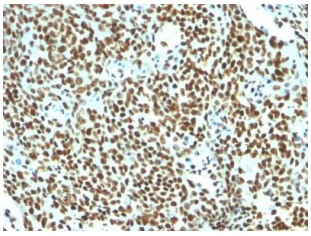
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human tonsil tissue labeling Human Nuclear Antigen with ab215396 at 0.5 µg/ml.



Immunocytochemistry/ Immunofluorescence - Anti-Nuclear Antigen antibody [NM106] - Nuclear Marker (ab215396)

Nuclear Antigen Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Nuclear Antigen antibody

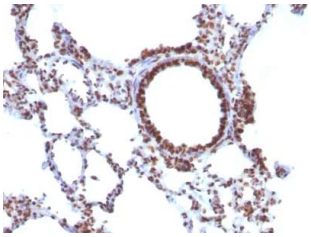
Immunocytochemistry analysis of HeLa cells labelling Human Nuclear Antigen antibody with ab215396 at 2 µg/mL. Goat Anti-mouse IgG (Alexa Fluor® 488) was used as the secondary antibody (green). Membranes were labeled with Phalloidin (Red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nuclear Antigen antibody [NM106] - Nuclear Marker (ab215396)

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

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human tonsil tissue labeling Human Nuclear Antigen with ab215396 at 0.5 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nuclear Antigen antibody [NM106] - Nuclear Marker (ab215396)

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

Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat lung tissue labeling Human Nuclear Antigen with ab215396 at 0.5 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nuclear Antigen antibody [NM106] - Nuclear Marker (ab215396)

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

Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat colon tissue labeling Human Nuclear Antigen with ab215396 at 0.5 µg/ml.

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