

## Product datasheet

# Anti-Influenza A Virus Nucleoprotein antibody [AA5H] ab20343

★★★★★ 2 Abreviews 82 References 3 Images

### Overview

<b>Product name</b>	Anti-Influenza A Virus Nucleoprotein antibody [AA5H]
<b>Description</b>	Mouse monoclonal [AA5H] to Influenza A Virus Nucleoprotein
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Influenza A
<b>Immunogen</b>	Tissue, cells or virus corresponding to Influenza A Influenza A Virus Nucleoprotein. Influenza A/Puerto Rico/8/34 (H1N1) and A/Bangkok/1/79 (H3N2) viruses.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.09% Sodium azide Constituent: PBS
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	>95% pure (SDS-PAGE).
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	AA5H
<b>Myeloma</b>	P3x63-Ag8.653
<b>Isotype</b>	IgG2a

Light chain type

unknown

## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab20343 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
IHC-P		1/1000.

## Target

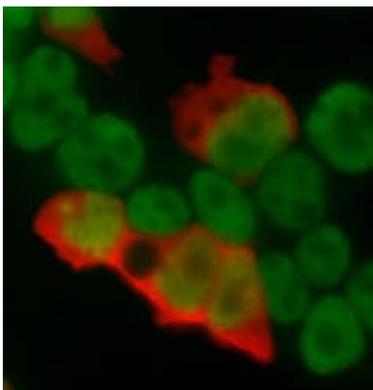
### Relevance

The nucleoprotein (NP) of Influenza virus encapsulates the negative strand of the viral RNA and is essential for replicative transcription. It may also be involved in other essential functions throughout the virus life cycle. As well as binding ssRNA, NP is able to self associate to form large oligomeric complexes. NP is able to interact with a variety of other macromolecules of both viral and cellular origins. It binds the PB1 and PB2 subunits of the polymerase and the matrix protein M1. "NP has also been shown to interact with at least four cellular polypeptide families: nuclear import receptors of the importin class, filamentous (F) actin, the nuclear export receptor CRM1 and a DEAD box helicase BAT1/UAP56" (Portela et al 2002).

### Cellular localization

Host cell nucleus

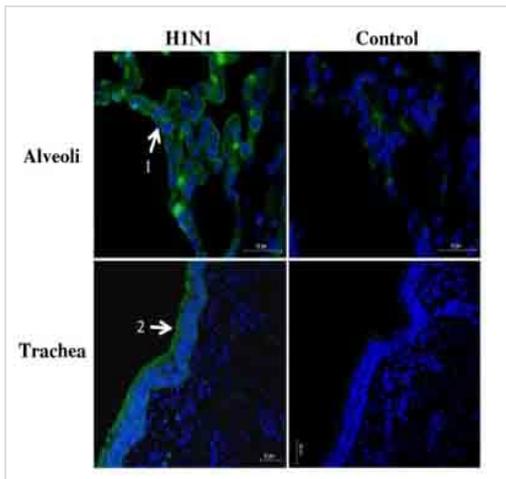
## Images



Ab20343 positively staining formaldehyde fixed Influenza A infected human 293T cells (red) counterstained with AUF-1 (green).  
ab20343 was used at 1/1000 with no antigen retrieval.

This image is courtesy of an Abreview submitted by **Paul Digard** on **24 August 2005**. We do not have any further information relating to this image.

Immunocytochemistry/ Immunofluorescence - Anti-Influenza A Virus Nucleoprotein antibody [AA5H] (ab20343)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Influenza A Virus

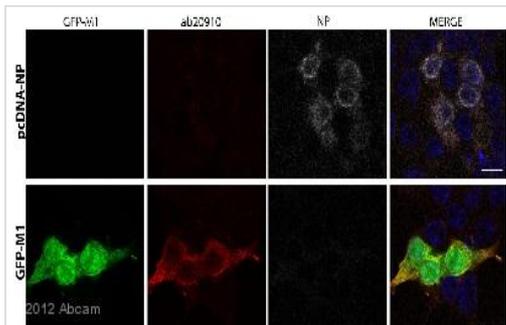
Nucleoprotein antibody [AA5H] (ab20343)

Image from Dr RK Nelli et al, BMC Vet Res. 2010 Jan 27;6:4, Fig 5.

ab20343 staining Influenza A Virus Nucleoprotein in porcine lung tissue by Immunohistochemistry (Formalin-fixed, paraffin-embedded sections).

Host receptor binding assays with H1N1 classical swine strain (A/Sw/lowa/15/30), a subtype closely related to the human 1918 pandemic influenza virus. Briefly, paraffin embedded 5 µm sections of lung tissues were deparaffinised in xylene and rehydrated by alcohol. Deparaffinised tissue sections were incubated with TPCK trypsin treated swine influenza virus for 24 hours at 37°C.

Paradoxically, we found that mammalian H1N1 virus binds more efficiently at 37°C than at the usual 4°C. The sections were washed, blocked with goat serum for 30 minutes, and incubated with ab20343 at a 1/1000 dilution, overnight in a humidified chamber at 4°C. A secondary antibody, FITC-labelled goat anti-mouse IgG was applied at 1/500 dilution for 2 hours at room temperature. After three further washes with TBS, the sections were mounted with ProLong Gold anti-fa



Immunocytochemistry/ Immunofluorescence - Anti-Influenza A Virus Nucleoprotein antibody [AA5H] (ab20343)

Image is courtesy of an AbReview submitted by Dr Maria Amorim.

Immunocytochemical immunofluorescence analysis of Formaldehyde-fixed human kidney epithelial cells, labelling Influenza A Virus M1 matrix protein with ab20910 at a dilution of 1/500 incubated for 1 hour at 18°C in 1% FCS PBS. Blocking was with 1% serum incubated for 30 minutes at 18°C. Secondary was a donkey anti-goat Alexa Fluor® 568 undiluted. Cells were transfected with either GFP-M1 or pCDNA2-NP, as indicated on the left hand side of the figure. 24h later cells were fixed and stained for M1 using ab20910 (red) or NP using ab20343 (grey). The abcam 20910 detected M1 in cells transfected with GFP-M1 but not pCDNA3-NP. Moreover, the level of co-localization between GFP-M1 and ab20910 was quite good.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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