Anti-Influenza A Virus Nucleoprotein antibody [C43] ab128193

Overview

Product name: Anti-Influenza A Virus Nucleoprotein antibody [C43]
Description: Mouse monoclonal [C43] to Influenza A Virus Nucleoprotein
Host species: Mouse
No cross reactivity with influenza B viruses.

Tested applications: Suitable for: WB, ELISA, ICC/IF
Species reactivity: Reacts with: Influenza A
Immunogen: Tissue, cells or virus corresponding to Influenza A Virus Nucleoprotein. Human Influenza A Virus H3N2 strain
Database link: P69291

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer: pH: 6
Constituents: 50% Glycerol, 49% PBS
Purity: Proprietary Purification
Purification notes: Produced in serum-free medium and purified by proprietary chromatography procedure under mild conditions, 90~95% pure by SDS-PAGE
Clonality: Monoclonal
Clone number: C43
Isotype: IgG2a

Applications
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

Immunofluorescence assay of MDCK cells derived from canine kidney cells, and A549 cells derived from human lung carcinoma cells, that were infected with H1N1 influenza virus (A/PuertoRico/8/34). Samples were taken at 3, 9, and 24 hours post-infection. Influenza A Virus Nucleoprotein antibody (ab128193) efficiently detected virus-infected MDCK and A549 cells as early as 3 h after infection. The cells were fixed with 4% paraformaldehyde in phosphate-buffered saline (PBS) and permeabilized with 0.1% 0.1% Triton X-100 in PBS. The bound antibody was visualized by a further reaction with an green flurescent secondary antibody.

Applications

Our Abpromise guarantee covers the use of ab128193 in the following tested applications.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>1/300 - 1/1000.</td>
</tr>
<tr>
<td>ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>1/200.</td>
</tr>
</tbody>
</table>

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
Anti-Influenza A Virus Nucleoprotein antibody [C43] (ab128193) at 1/1000 dilution + MDCK cells infected with Influenza A virus (H1N1) PuertoRico/8/34

**Secondary**

Rabbit Anti-Mouse IgG H&L (HRP) (ab97046) at 1/10000 dilution

Immunofluorescence assay of 293T cells expressing HA or NP of pandemic (H1N1) 2009 influenza A virus (A/Suita/1/2009). Influenza A Virus Nucleoprotein antibody (ab128193) specifically recognized NP-expressing cells while a proprietary mouse anti-HA monoclonal antibody specifically recognized HA.
All lanes: Anti-Influenza A Virus Nucleoprotein antibody [C43] (ab128193) at 1/300 dilution

Lanes 1 & 6 & 11: MDCK cells mock infected
Lane 2: MDCK cells infected with H1N1 (A/PuertoRico/8/34) collected 3 hrs post-infection
Lane 3: MDCK cells infected with H1N1 (A/PuertoRico/8/34) collected 9 hrs post-infection
Lane 4: MDCK cells infected with H1N1 (A/PuertoRico/8/34) collected 24 hrs post-infection
Lane 5: MDCK cells infected with H1N1 (A/PuertoRico/8/34) collected 48 hrs post-infection
Lane 7: MDCK cells infected with H5N2 (A/crow/Kyoto/53/04) collected 3 hrs post-infection
Lane 8: MDCK cells infected with H5N2 (A/crow/Kyoto/53/04) collected 9 hrs post-infection
Lane 9: MDCK cells infected with H5N2 (A/crow/Kyoto/53/04) collected 24 hrs post-infection
Lane 10: MDCK cells infected with H5N2 (A/crow/Kyoto/53/04) collected 48 hrs post-infection
Lane 12: MDCK cells infected H5N1 (A/duck/HK/342/78) collected 3 hrs post-infection
Lane 13: MDCK cells infected with H5N1 (A/duck/HK/342/78) collected 9 hrs post-infection
Lane 14: MDCK cells infected with H5N1 (A/duck/HK/342/78) collected 24 hrs post-infection
Lane 15: MDCK cells infected with H5N1 (A/duck/HK/342/78) collected 48 hrs post-infection

Tubulin was used as loading control.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,
please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors