Product datasheet

Anti-Matrix protein 1 antibody ab20910

Overview

Product name: Anti-Matrix protein 1 antibody
Description: Goat polyclonal to Matrix protein 1
Host species: Goat
Tested applications:
Suitable for: ICC/IF, ELISA, Conjugation, WB
 Unsuitable for: IHC
Species reactivity: Reacts with: Species independent
Immunogen: Full length native protein (purified) corresponding to Matrix protein 1. Purified M1 protein, Influenza A-Phillipines (H3N2).

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer:
- pH: 7.20
- Preservative: 0.1% Sodium azide
- Constituent: 0.0268% PBS
Purity: Ion Exchange Chromatography
Purification notes: >95% pure. Sodium sulfate precipitation and ion-exchange chromatography.
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab20910 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<td>ICC/IF</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent dilution.</td>
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<tr>
<td>ELISA</td>
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<td>Use at an assay dependent dilution.</td>
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Application notes

Is unsuitable for IHC.

Target

Relevance

Influenza virus type A matrix protein, also known as M1, is composed of a 252 amino acid sequence and is type-specific in influenza viruses. It is located inside the viral lipid envelope and plays a key role in virus assembly and replication. M1 can be isolated from particles by removing the envelope with detergents and reducing the pH to 4.0. Influenza viruses are a common and widely spread infectious agent. Like many other viruses, influenza virus are constantly undergoing mutations and thereby avoiding the immune system. The Influenza A Virus M proteins form a continuous shell on the inner side of the lipid bilayer, maintaining the structural integrity of the virus particle through hydrophobic interactions.

Cellular localization

Cytoplasmic

Images

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 fro 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.
**Western blot - Anti-Matrix protein 1 antibody**

This image is courtesy of an abreview submitted by Maria Amorim.

**All lanes**: Anti-Matrix protein 1 antibody (ab20910) at 1/500 dilution

- **Lane 1**: 293T cells transfected with GFP-M1 and infected with influenza A virus
- **Lane 2**: 293T cells transfected with GFP-M1 and mock infected
- **Lane 3**: 293T cells transfected with pcDNA-NP and infected with influenza A virus
- **Lane 4**: 293T cells transfected with pcDNA-NP and mock infected
- **Lane 5**: 293T cells infected with influenza A virus
- **Lane 6**: 293T cells mock infected
- **Lane 7**: M1 expressed using a minireplicon system
- **Lane 8**: Minireplicon system control (no PB2)

**Secondary**

**All lanes**: Donkey anti-goat (IRDye® 800CW) at 1/10000 dilution

- **Predicted band size**: 27.54 kDa
- **Observed band size**: 27.54 kDa

**why is the actual band size different from the predicted?**

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

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