SANTA CRUZ BIOTECHNOLOGY, INC.

Influenza A NP (5D8): sc-80481

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Influenza A viruses are negative sense, single-stranded, segmented RNA viruses which are hosted by birds, but may infect several species of mammals. All known subtypes are endemic in birds. Influenza A subtypes are classified based on the combination of the virus coat glycoproteins hemagglutinin (HA) and neuraminidase (NA) subtypes. There are 16 different HA antigens (H1-H16) and 9 different NA antigens (N1-N9) for Influenza A. The extent of infection into host organisms is determined by HA, which interacts with cell surface proteins containing oligosaccharides with terminal sialyl residues. Influenza A nucleoprotein (NP) associates with its RNA genome and is present in eight separate segments of ribonucleoprotein (RNP), each of which has to be present for successful replication.

REFERENCES

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3. Webster, R.G. and Rott, R. 1987. Influenza virus A pathogenicity: the pivotal role of hemagglutinin. Cell 50: 665-666.
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5. Skehel, J.J. and Wiley, D.C. 2000. Receptor binding and membrane fusion in virus entry: the Influenza hemagglutinin. Annu. Rev. Biochem. 69: 531-569.
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SOURCE

Influenza A NP (5D8) is a mouse monoclonal antibody raised against unpurified Influenza A/Puerto Rico/8/34 (H1N1) virus and purified Influenza A virus.

PRODUCT

Each vial contains 50 µg IgG_{2a} in 500 µl PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

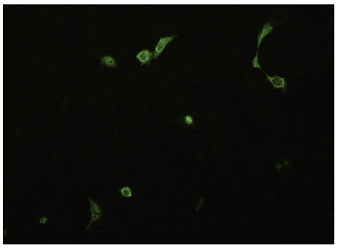
Influenza A NP (5D8) is recommended for detection of nucleoprotein (NP) of Influenza A virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Influenza A NP: 56 kDa.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Influenza A NP (5D8): sc-80481. Immunofluorescence staining of acetone-fixed, Influenza A-infected Vero cells showing cytoplasmic and nuclear localization.

SELECT PRODUCT CITATIONS

1. Liu, L., et al. 2012. Influenza A virus induces interleukin-27 through cyclooxygenase-2 and protein kinase A signaling. J. Biol. Chem. 287: 11899-11910.
2. Armstrong, S.M., et al. 2012. Influenza infects lung microvascular endothelium leading to microvascular leak: role of apoptosis and claudin-5. PLoS ONE 7: e47323.
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4. Qu, B., et al. 2012. Human intestinal epithelial cells are susceptible to Influenza virus subtype H9N2. Virus Res. 163: 151-159.
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RESEARCH USE

For research use only, not for use in diagnostic procedures.