VIASURE

"Ready & Easy-to-use" kits. Lyophilised product

> Transport and storage at room temperature. Shelf-life: 24 months

CE Validated according to ISO 13485 and CE marked

Respiratory Viral Panel I

Influenza virus is an enveloped, single stranded RNA virus that belongs to the Orthomyxoviridae family and causes the majority of viral lower respiratory tract infections. **Influenza A and B are a significant cause of morbidity and mortality worldwide**, considering that elderly and compromised individuals are especially at risk of developing severe illness and complications such as pneumonia. People feel some or all of these symptoms: fever or feeling feverish/chills, cough, sore throat, nasal stuffiness and discharge, myalgia, headaches, and anorexia. The influenza viruses can be spread from person to person in two different ways: through the air (large droplets and aerosols from sneezing and coughing), and by direct or indirect contact.

Currently, influenza A(H1N1) and A(H3N2) are the circulating seasonal influenza A virus subtypes. This seasonal A(H1N1) virus is the same virus that caused the 2009 influenza pandemic. Influenza A(H3N2v) viruses were first detected in people in 2011, being its infections associated with prolonged exposure to pigs at agricultural fairs. Besides, humans can also be infected with avian influenza virus subtypes A(H5N1) and A(H7N9) since their emergence in China in 2003 and 2013, respectively. Influenza A(H5N1) virus has spread from Asia to Europe and Africa and has become entrenched in poultry populations in some countries. Avian Influenza A(H7N9) virus spreads faster than H5N1 and commonly resulted in severe respiratory illness, although its mortality rate (20%) is lower than that attributed to H5N1 virus. Whereas, Influenza B is only divided into 2 antigenically and genetically distinct lineages, Victoria and Yamagata.

Human respiratory syncytial virus (RSV) belong to the Paramyxoviridae family and is a common contributor of respiratory infections causing bronchitis, pneumonia, and chronic obstructive pulmonary infections in people of all ages.

Diagnosis can be problematic, as a wide range of pathogens can cause acute respiratory infections presenting with similar clinical syndromes. Real-time PCR assays have been shown to be a sensitive and specific diagnostic tool for the detection of Influenza A, Influenza B and RSV viruses, as well as, of Influenza A subtyping.

VIASURE Respiratory Viral Panel I Real Time PCR Detection Kit is designed for simultaneous detection of Influenza A, Influenza B, and Respiratory Syncytial (RSV) viruses and subtyping of Influenza A (H1N1)pdm09, H3N2, H5N1, and H7N9 in respiratory samples from patients with signs and symptoms of respiratory viral infection

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Analytical sensitivity

Respiratory Viral Panel I Real Time PCR Detection Kit has a detection limit of ≥10 RNA copies per reaction for Flu A, Flu B, RSV, (H1N1)pdm09, H3N2, H5N1 and H7N9 (Figure 1-9).





Figure 1.

Dilution series of Influenza A (10⁷-10¹ copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (Multiplex reaction mix Flu A, Flu B & RSV, channel FAM).





Figure 3.

Dilution series of RSV (107-101 copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (Multiplex reaction mix Flu A, Flu B & RSV, channel Cy5)



Figure 4.

Dilution series of Influenza A(H1N1) pdm09 (10⁷-10¹ copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (Multiplex reaction mix Flu Typing II, channel FAM).



Figure 5.

Dilution series of Influenza A(H5N1) (10⁷-10¹ copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (Multiplex reaction mix Flu Typing II, channel HEX).



Dilution series of Influenza

A(H3N2) (10⁷-10¹ copies/rxn)

template run on the Bio-Rad

CFX96™ Real-Time PCR De-

tection System (Multiplex reac-

tion mix Flu Typing II, channel

ROX).

Figure 7. Dilution series of Influenza A(H7N9) (10⁷-10¹ copies/rxn) template run on the Bio-Rad CFX96[™] Real-Time PCR Detection System (Multiplex reaction mix Flu Typing II, channel



Figure 8.

tion, channel FAM).



Figure 9.

Dilution series of Influenza Dilution series of Influenza A(H5N1) (107-101 copies/rxn) A(H7N9) (107-101 copies/rxn) template run on the Bio-Rad template run on the Bio-Rad CFX96™ Real-Time PCR Detec- CFX96TM Real-Time PCR Detion System (Multiplex reaction tection System (Multiplex reacmix H5N1 + H7N9 Confirma- tion mix H5N1 + H7N9 Confirmation, channel ROX).

References - Respiratory Viral Panel I Real Time PCR Detection Kit

6 x 8-well strips, low profile VS-RPA106L	6 x 8-well strips, high profileVS-RPA106H
12 x 8-well strips, low profile VS-RPA112L	12 x 8-well strips, high profileVS-RPA112H
18 x 4-well strips, Rotor-Gene® VS-RPA172	

For more information and use procedure, read the instructions for use included in this product.

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