VIASURE Flu A, Flu B & SARS-CoV-2 Real Time PCR Detection Kit

VIASURE Flu A, Flu B & SARS-CoV-2 Real Time PCR Detection Kit is a real-time RT-PCR test designed for the qualitative detection of RNA from the Influenza A (Flu A), Influenza B (Flu B) and/or SARS-CoV-2 in nasopharyngeal and oropharyngeal swabs from individuals suspected of respiratory infections by their healthcare provider.

Coronavirus are enveloped non-segmented positive-sense RNA viruses and belong to Coronaviridae family. Human-to-human transmission of the SARS-CoV-2 has been confirmed, even in the incubation period without symptoms, and the virus could cause severe respiratory illness like those SARS-CoV produced. Although the pneumonia is the principal illness associated, a few patients have developed severe pneumonia, pulmonary edema, acute respiratory distress syndrome, or multiple organ failure and death. Centers of Disease Control and Prevention (CDC) believes that symptoms of SARS-CoV-2 may appear in as few as 2 days or as long as 14 days after exposure, being the most common fever or chills, cough, fatigue, anorexia, myalgia and dyspnea.

Influenza viruses belong to the Orthomyxoviridae family and cause 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 immunocompromised 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.

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 SARS-CoV-2 viruses.

“Ready & Easy-to-use” kits. Lyophilised product
Transport and storage at room temperature. Shelf-life: 24 months
Validated according to ISO 13485 and CE marked
VIASURE Flu A, Flu B & SARS-CoV-2 Real Time PCR Detection Kit is designed for the diagnosis of Influenza A (Flu A), Influenza B (Flu B) and/or SARS-CoV-2 in respiratory samples.

The detection is done in one step real time RT format where the reverse transcription and the subsequent amplification of specific target sequence occur in the same reaction well. The isolated RNA target is transcribed generating complementary DNA by reverse transcriptase which is followed by the amplification of a conserved region of the M1 gene for Flu A and Flu B, and two conserved regions of N gene (N1 and N2) for SARS-CoV-2 using specifics primers and a fluorescent-labeled probe.

VIASURE Flu A, Flu B & SARS-CoV-2 Real Time PCR Detection Kit has a detection limit of 10 genome copies/rxn for Flu A, 40 genome copies/rxn for Flu B and 10 genome copies/rxn for SARS-CoV-2. (Figures 1, 2 and 3).

![Figure 1. Dilution series of Flu A (10^7-10^1 copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (FAM channel).](image1)

![Figure 2. Dilution series of Flu B (10^7-10^1 copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (ROX channel).](image2)

![Figure 3. Dilution series of SARS-CoV-2 (10^7-10^1 copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (Cy5 channel).](image3)

References - VIASURE Flu A, Flu B & SARS-CoV-2 Real Time PCR Detection Kit -

- 6 x 8-well strips, low profile VS-ABC106L
- 6 x 8-well strips, high profile VS-ABC106H
- 12 x 8-well strips, low profile VS-ABC112L
- 12 x 8-well strips, high profile VS-ABC112H
- 96-well plate, low profile VS-ABC113L
- 96-well plate, high profile VS-ABC113H
- 9 x 4-well strips, Rotor-Gene® VS-ABC136
- 18 x 4-well strips, Rotor-Gene® VS-ABC172

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