VIASURE MULTIPLEX

Flu A+B Real Time PCR Detection Kit

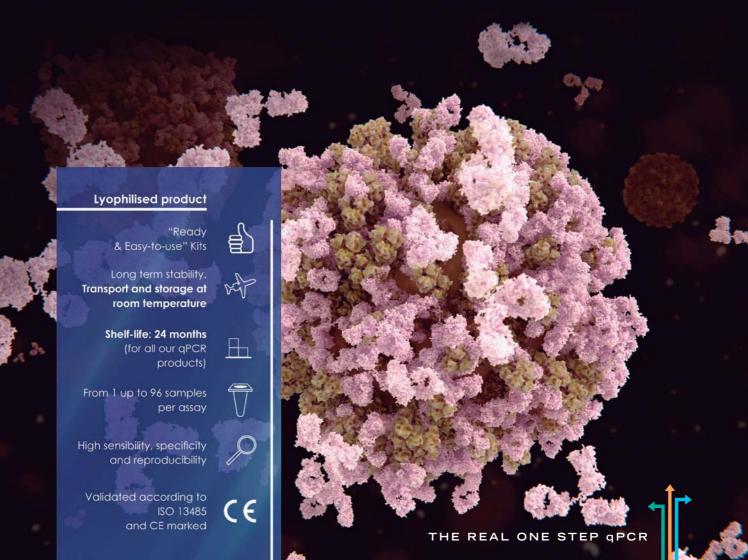
Pathogen and product description

nfluenza viruses belong to the *Orthomyxoviridae* family and cause the majority of viral lower respiratory tract infections. There are 3 types of influenza, A and B being the most common in humans, while influenza C is less common and produces milder disease.

Both types 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. After an incubation period of one to two days, the illness has an abrupt onset. 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. Wild waterfowl are believed to be the natural reservoir of influenza A viruses, which can transmit the virus to numerous other species, primarily poultry, pigs, and humans.

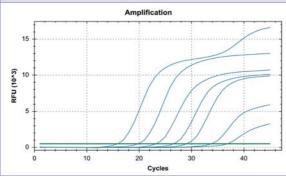
VIASURE Flu A+B Real Time PCR Detection Kit is designed for the diagnosis of Flu A and/or Flu B in respiratory samples. The isolated RNA target is transcribed generating complementary DNA by reverse transcriptase which is followed by amplification of a conserved region of the M1 gene for Flu A and Flu B using specifics primers and a fluorescent-labeled probe.





Analytical sensitivity

VIASURE *Flu A+B* Real Time PCR Detection Kit has a detection limit of ≥ 10 RNA copies per reaction for Flu A and Flu B (figures 1 and 2).



Amplification RFU (10⁴3) 40

Figure 1. Dilution series of Flu A (107–101 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (FAM channel).

Figure 2. Dilution series of Flu B (10⁷–10¹ copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (ROX channel).

Components

| Reagent/Material | Description | Quantity |
|--------------------------|--|------------------------|
| Flu A+B 8-well strips | A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format | 6/12 x 8-well strip |
| Flu A+B 96-well plate | A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format | 1 plate |
| Rehydration Buffer | Solution to reconstitute the stabilized product | 1 vial x 1,8 mL |
| Flu A+B Positive Control | Non-infectious synthetic lyophilized cDNA | 1 vial |
| Negative Control | Non template control | 1 vial x 1 mL |
| Water RNAse/DNAse free | Water RNAse/DNAse free | 1 vial x 1 mL |
| Tear-off 8-cap strips | Optical caps for sealing wells during thermal cycling | 6/12 x 8-cap strip |
| Shell Frame Grid | Shell Frame Grid | 1 or 2 |

Kit References

| Reference | Description |
|------------|--|
| VS-IAB106L | Viasure Flu A+B Real Time PCR Detection Kit 6 x 8-well strips, low profile |
| VS-IAB106H | Viasure Flu A+B Real Time PCR Detection Kit 6 x 8-well strips, high profile |
| VS-IAB112L | Viasure Flu A+B Real Time PCR Detection Kit 12 x 8-well strips, low profile |
| VS-IAB112H | Viasure Flu A+B Real Time PCR Detection Kit 12 x 8-well strips, high profile |
| VS-IAB113L | Viasure Flu A+B Real Time PCR Detection Kit 96-well plate, low profile |
| VS-IAB113H | Viasure Flu A+B Real Time PCR Detection Kit 96-well plate, high profile |

Work Flow

One-step rehydration of wells and add your extracted RNA



Add 15 µl of rehydration buffer into each well

STEP 2 Add 5 µl of RNA sample / positive control negative control



STEP 3 Load the strips into the thermocycler and run the specified protocol



STEP 4 Interpretate results



