

VIASURE MULTIPLEX

Flu Typing I Real Time PCR Detection Kit

Pathogen and product description

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.

VIASURE *Flu Typing I* Real Time PCR Detection Kit is

designed for the diagnosis of Influenza A (H1N1)pdm09 and H3N2 subtypes in clinical samples. The detection is done in a one-step real time RT format where the reverse transcription and the subsequent amplification of the specific targeted 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 *hemagglutinin* gene for subtyping of Influenza A (H1N1)pdm09 and H3N2, using specific primers and a fluorescent-labelled probes.

VIASURE *Flu Typing I* Real Time PCR Detection Kit contains in each well all the components necessary for real time PCR assay (specific primers/probes, dNTPs, buffer, polymerase and retrotranscriptase) in a stabilized format, as well an internal control to monitor PCR inhibition.



Analytical sensitivity

VIASURE Flu Typing I Real Time PCR Detection Kit has a detection limit of ≥ 10 RNA copies per reaction for Influenza A (H1N1)pdm09 and H3N2 (Figures 1 and 2).

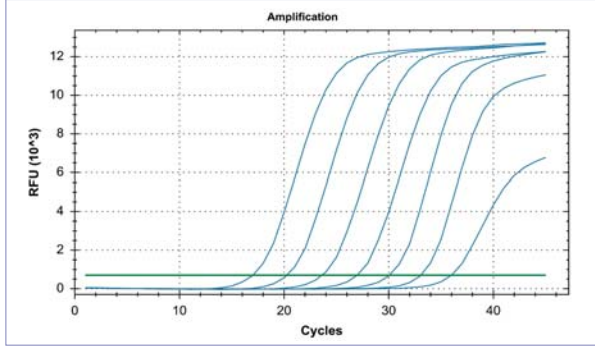


Figure 1. Dilution series of Influenza A (H1N1)pdm09 (10^7 – 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (FAM channel).

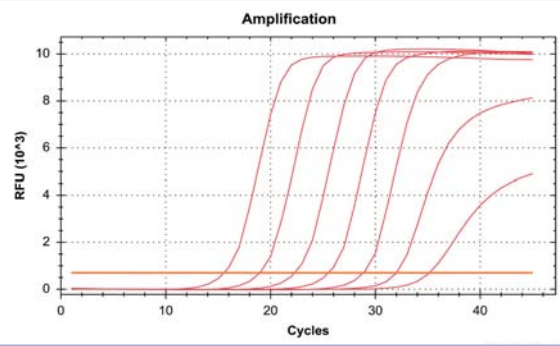


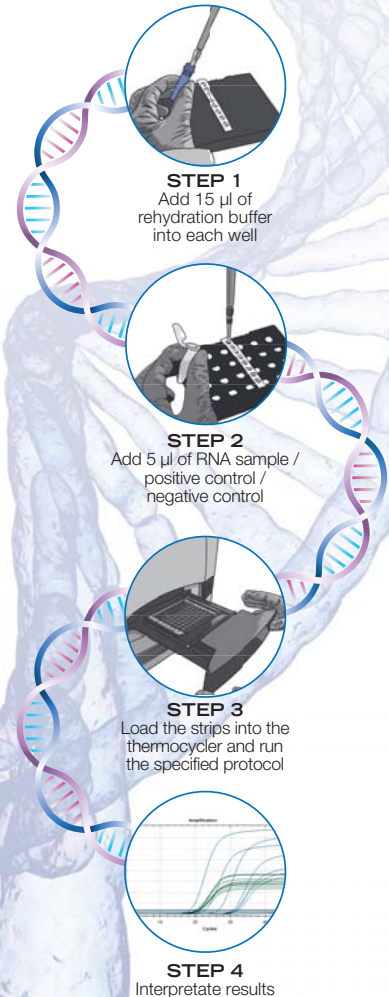
Figure 2. Dilution series of Influenza A (H3N2) (10^7 – 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (ROX channel).

Components

Reagent/Material	Description	Colour	Quantity
Flu Typing I 8-well strips	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	White	6/12 X 8-well strip
Flu Typing I 96-well plate	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	White	1 plate
Rehydration Buffer	Solution to reconstitute the stabilized product	Blue	1 vial x 1.8 mL
Flu Typing I Positive Control	Non-infectious synthetic lyophilized cDNA	Red	1 vial
Negative Control	Non template control	Violet	1 vial x 1 mL
Water RNase/DNase free	Water RNase/DNase free	White	1 vial x 1 mL
Tear-off 8-cap strips	Optical caps for sealing Wells during thermal cycling	Transparent	6/12 x 8-cap strip

Work Flow

One-step rehydration of wells and add your extracted RNA



Kit References

Reference	Description
VS-H13106L	VIASURE Flu Typing I Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-H13106H	VIASURE Flu Typing I Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-H13112L	VIASURE Flu Typing I Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-H13112H	VIASURE Flu Typing I Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-H13113L	VIASURE Flu Typing I Real Time PCR Detection Kit 96-well plate, low profile
VS-H13113H	VIASURE Flu Typing I Real Time PCR Detection Kit 96-well plate, high profile