VIASURE

Influenza H1N1 Real Time PCR Detection Kit

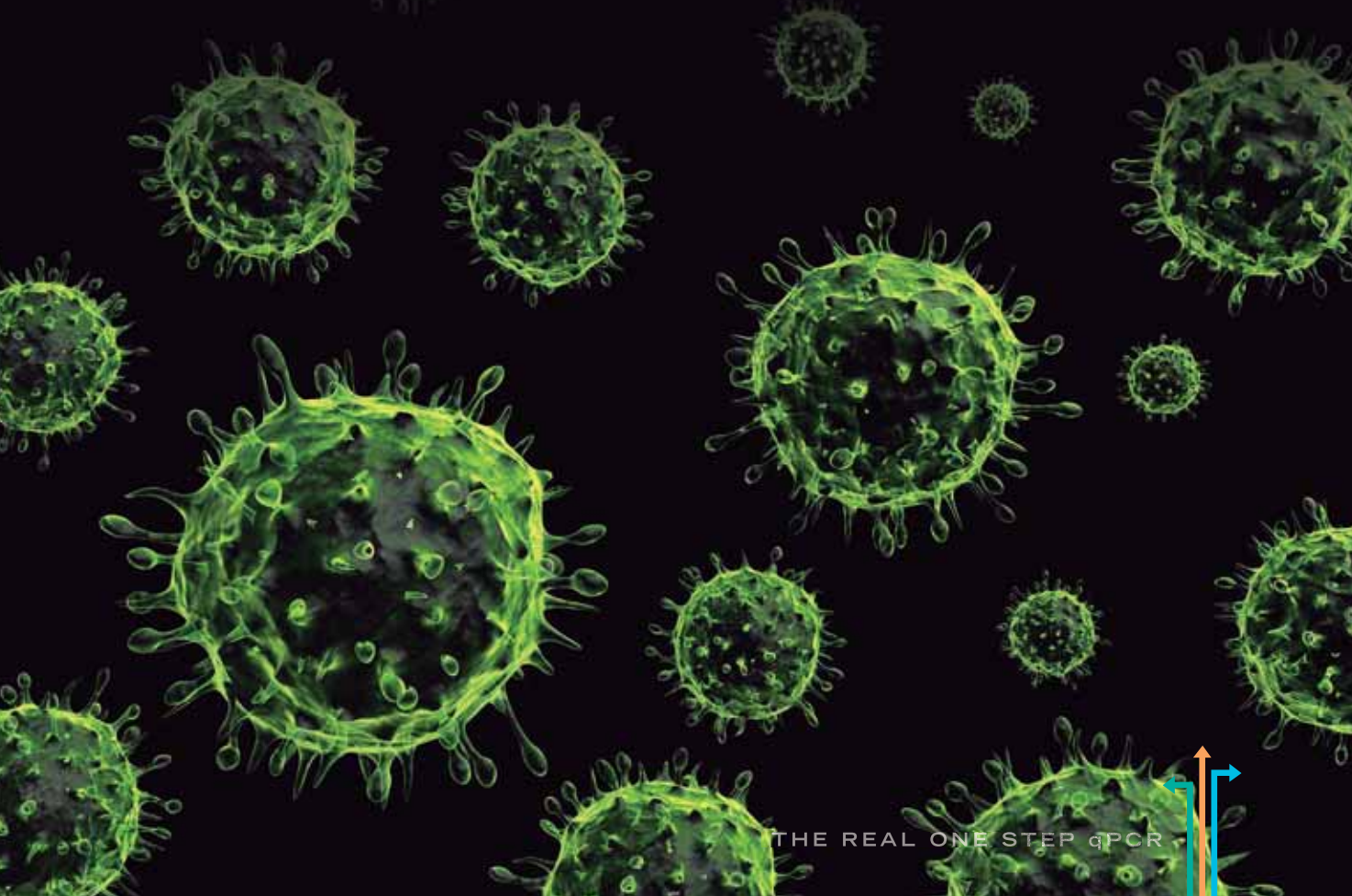
Pathogen and product description

Influenza viruses belong to the *Orthomyxoviridae* family and cause the majority of viral lower respiratory tract infections. In 2009, a strain of Influenza A(H1N1) virus containing sequences of avian, swine and human Influenza emerged and spread across the world causing Influenza pandemic. This virus known as A (H1N1)pdm09 virus or (H1N1)v, has been widely circulating across the globe since then, and is now established in human populations as a seasonal Influenza virus.

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. After an incubation period of one to two days, the illness has an abrupt onset. People often feel some or all of these symptoms: fever or feeling feverish/chills, cough, sore throat, nasal stuffiness and discharge, myalgia, headaches and anorexia.

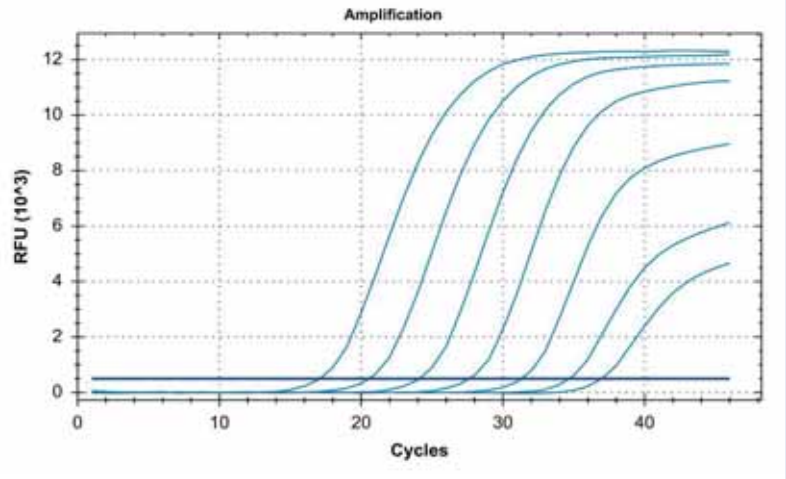
The Influenza viruses can be spread from person to person in two different ways: through the air (large droplets and aerosols from sneezing and coughing), and by direct or indirect contact. Wild waterflow are believed to be natural reservoir of Influenza A viruses, which can transmit the virus to numerous other species, primarily poultry, pigs and humans.

VIASURE Influenza H1N1 Real Time PCR Detection Kit is designed for the diagnosis of Influenza A(H1N1)pdm09 virus. After RNA isolation, the identification of Influenza A(H1N1)pdm09 is performed by the use of target specific primers and a fluorescent-labeled probe that hybridizes to a conserved region with the *hemagglutinin* gene using specific primers and a fluorescent-labeled probe.



Analytical sensitivity

VIASURE *Influenza H1N1* Real Time PCR Detection Kit has a detection limit of ≥ 50 RNA copies per reaction.



Dilution series of Influenza A (H1N1) 2009 (10^7– 5 x 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System.

Components

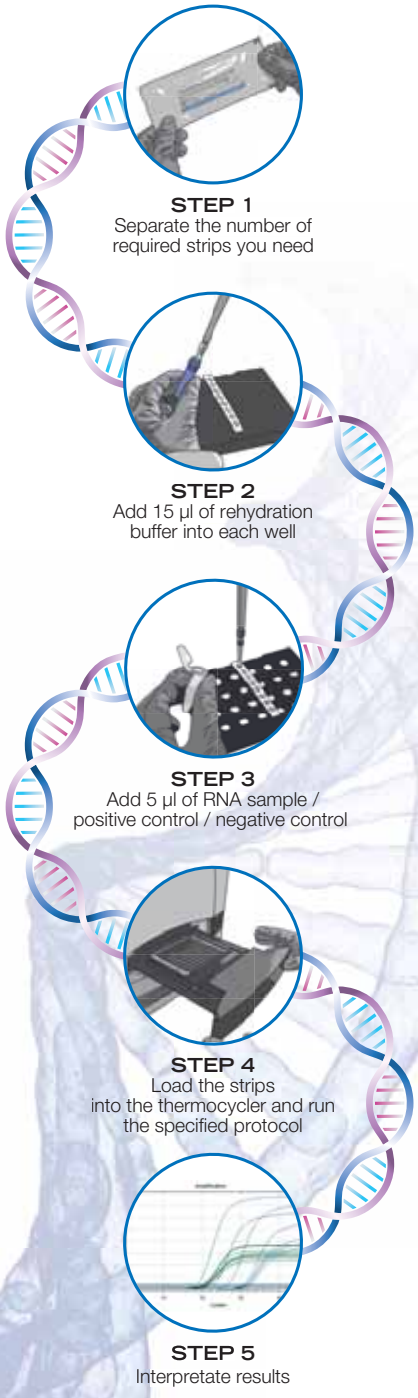
Reagent/Material	Description	Quantity
Influenza H1N1 8-well strips	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	6/12 x 8-well strip
Influenza H1N1 96-well plate	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	1 plate
Rehydration Buffer	Solution to reconstitute the stabilized product	1 vial x 1,8 mL
Influenza H1N1 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-HNV106L	Viasure *Influenza H1N1* Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-HNV106H	Viasure *Influenza H1N1* Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-HNV112L	Viasure *Influenza H1N1* Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-HNV112H	Viasure *Influenza H1N1* Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-HNV113L	Viasure *Influenza H1N1* Real Time PCR Detection Kit 96-well plate, low profile
VS-HNV113H	Viasure *Influenza H1N1* Real Time PCR Detection Kit 96-well plate, high profile

Work Flow

One-step rehydration of wells and add your extracted viral RNA



STEP 1
Separate the number of required strips you need

STEP 2
Add 15 µl of rehydration buffer into each well

STEP 3
Add 5 µl of RNA sample / positive control / negative control

STEP 4
Load the strips into the thermocycler and run the specified protocol

STEP 5
Interpretate results

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