

VIASURE MULTIPLEX

RSV A+B Real Time PCR Detection Kit

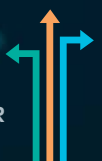
Pathogen and product description

Human respiratory syncytial viruses (RSV) belong to the *Paramyxoviridae* family and are the most important viral agents of acute respiratory infections. RSV is divided into two major groups, A and B, based on antigenic and genomic differences. Respiratory syncytial virus is a common contributor of respiratory infections causing bronchitis, pneumonia, and chronic obstructive pulmonary infections in people of all ages. But it mainly affects children, elderly and immunocompromised individuals along with other viral infections leading to high mortality and morbidity. People often feel some or all of these symptoms: rhinorrhea, low-grade fever, cough, sore throat, headache, and wheezing.

RSV is transmitted via large nasopharyngeal secretion droplets from infected individuals. These droplets enter via the mucus membranes of the eyes, nose and mouth following close contact, or self-inoculation after touching contaminated surfaces.

Diagnosis can be problematic, as a wide range of pathogens can cause acute respiratory infections presenting with similar clinical syndromes. RSV is known to be a very labile virus and except in infection of children, the titre of infectious particles is low. Therefore Real Time PCR is the preferred method of diagnostic testing for RSV considering that it is one of the most sensitive and specific diagnostic tool.

VIASURE RSV A+B Real Time PCR Detection Kit is designed for the diagnosis of RSV A and/or B 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 amplification of a conserved region of the *N* gene using specific primers and a fluorescent-labeled probe.



Analytical sensitivity

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

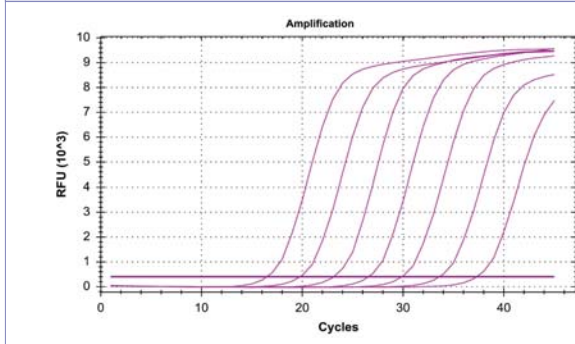


Figure 1. Dilution series of RSV A (10^7 – 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System.

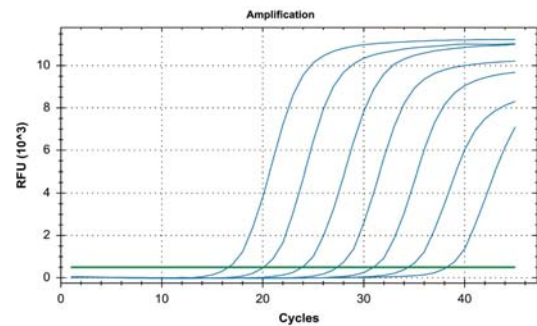


Figure 2. Dilution series of RSV B (10^7 – 10^1 copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System.

Components

Reagent/Material	Description	Quantity
RSV 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
RSV 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
RSV 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-RSV106L	Viasure RSV A+B Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-RSV106H	Viasure RSV A+B Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-RSV112L	Viasure RSV A+B Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-RSV112H	Viasure RSV A+B Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-RSV113L	Viasure RSV A+B Real Time PCR Detection Kit 96-well plate, low profile
VS-RSV113H	Viasure RSV A+B Real Time PCR Detection Kit 96-well plate, high profile

Work Flow

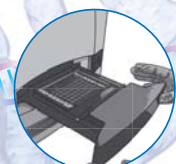
One-step rehydration of wells and add your extracted RNA



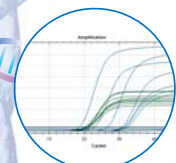
STEP 1
Add 15 μ l of rehydration buffer into each well



STEP 2
Add 5 μ l of RNA sample / positive control / negative control



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



STEP 4
Interpretate results



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