

# VIASURE MULTIPLEX

*Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit*

## Pathogen and product description

**A**denoviruses belong to the *Adenoviridae* family. There are more than 50 immunologically distinct human Adenovirus serotypes that can cause human infections ranging from respiratory disease and conjunctivitis to gastroenteritis. Adenoviruses can be spread due to close personal contact or air transmission by coughing and sneezing. Manifestations include common cold, fever, sore throat (pharyngitis), bronchitis and pneumonia.

Human Metapneumoviruses belong to the *Paramyxoviridae* family and are important cause of upper and lower respiratory infection. Clinical symptoms include cough, fever, nasal congestion and shortness of breath, and may progress to bronchiolitis or pneumonia. Metapneumovirus is mainly transmitted by infectious airborne droplets, and it has been reported as the second most frequently found virus in respiratory infections, with children younger than five years being the most susceptible to infection.

Human Bocaviruses belong to the *Parvoviridae* family and are believed to be important causative agents of upper and lower respiratory tract infections in young

children. Clinical manifestations range from mild upper respiratory tract infections to bronchiolitis, and lower respiratory tract diseases, such as pneumonia. The common symptoms are fever, cough, acute otitis media, tonsillitis and conjunctivitis, sinusitis and rhinorrhea.

VIASURE *Adenovirus, Metapneumovirus & Bocavirus* Real Time PCR Detection Kit is designed for the diagnosis of Adenovirus, Metapneumovirus and/or Bocavirus in respiratory samples. After DNA isolation, the identification of Adenovirus and Bocavirus is performed by the amplification of a conserved region of the *hexon* gene (Adenovirus) and the *NS1* gene (Bocavirus) using specific primers and a fluorescent-labelled probe. After RNA isolation, the detection of Metapneumovirus is done in one step real time 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 *N* gene of Metapneumovirus.

### Lyophilised product

"Ready & Easy-to-use" Kits



Long term stability.  
Transport and storage at room temperature



Shelf-life: 24 months  
(for all our qPCR products)



From 1 up to 96 samples per assay



High sensibility, specificity and reproducibility



Validated according to ISO 13485 and CE marked



THE REAL ONE STEP qPCR



## Analytical sensitivity

VIASURE Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit has a detection limit of  $\geq 10$  RNA/DNA copies per reaction (figures 1, 2 and 3).

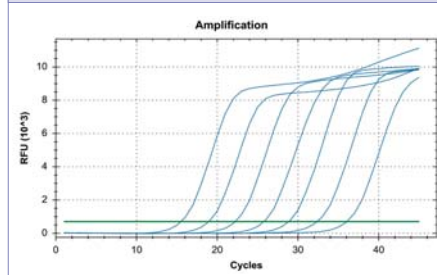


Figure 1. Dilution series of Adenovirus ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (FAM channel).

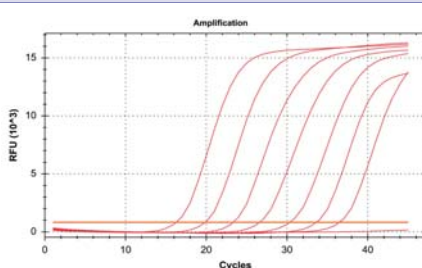


Figure 2. Dilution series of Metapneumovirus ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (ROX channel).

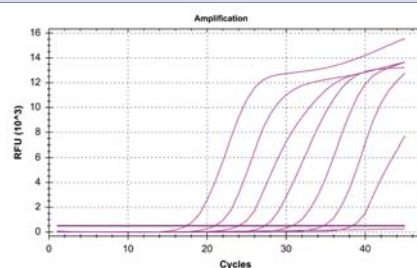


Figure 3. Dilution series of Bocavirus ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96 Touch™ Real-Time PCR Detection System (Cy5 channel).

## Components

Reagent/Material	Description	Colour	Amount
Adenovirus, Metapneumovirus & Bocavirus 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
Rehydration Buffer	Solution to reconstitute the stabilized product	Blue	1 vial x 1,8 mL
Adenovirus, Metapneumovirus & Bocavirus 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

## Kit References

Reference	Description
VS-AMB106L	VIASURE Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit 6 strips, Low
VS-AMB106H	VIASURE Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit 6 strips, High
VS-AMB112L	VIASURE Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit 12 strips, Low
VS-AMB112H	VIASURE Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit 12 strips, High
VS-AMB113L	VIASURE Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit 96-well plate, Low
VS-AMB113H	VIASURE Adenovirus, Metapneumovirus & Bocavirus Real Time PCR Detection Kit 96-well plate, High

## Work Flow

One-step rehydration of wells and add your extracted RNA/DNA



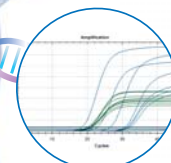
**STEP 1**  
Add 15  $\mu$ l of rehydration buffer into each well



**STEP 2**  
Add 5  $\mu$ l of RNA/DNA sample / positive control / negative control



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



**STEP 4**  
Interpretate results