

# VIASURE

## *Yellow Fever* Real Time PCR Detection Kit

### Pathogen and product description

**Y**ellow fever virus is an RNA virus that belongs to the *Flaviviridae* family. The “yellow” in the name refers to the jaundice caused by liver involvement that affects some patients.

Yellow fever is an acute viral haemorrhagic zoonotic disease transmitted between humans and from monkeys to humans by mosquitoes, primarily by *Aedes (aegypti)* and *Haemogogus*. Yellow fever has 3 transmission cycles: urban yellow fever, jungle (sylvatic) yellow fever and intermediate (savannah) yellow fever. More than 900 million inhabitants and travellers are at risk in the 44 endemic countries of Latin America and Africa.

The incubation period is generally 3–6 days from infection until illness. Many people do not experience symptoms, but when these do occur, the most common are an acute febrile phase occurs with myalgia, headache, back pain, anorexia, nausea, and sometimes vomiting; symptoms typically resolve within 1 week. Small proportions of patients enter a second, more toxic

phase within 24 hours of recovering from initial symptoms, and develop severe symptoms (with high fever, jaundice, bleeding, and kidney damage). Half of the patients who enter this toxic phase die; due to there is currently no specific anti-viral drug. Although, specific care to treat dehydration, liver and kidney failure, and fever improves outcomes. Therefore, vaccination and mosquito control are the most important means of preventing yellow fever which is difficult to diagnose, especially during the early stages.

VIASURE *Yellow Fever* Real Time PCR Detection Kit is designed for the diagnosis of Yellow fever in clinical 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 the amplification of a conserved region of the *ribonucleoprotein* gene using specific primers and a fluorescent-labelled probe.

#### 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)



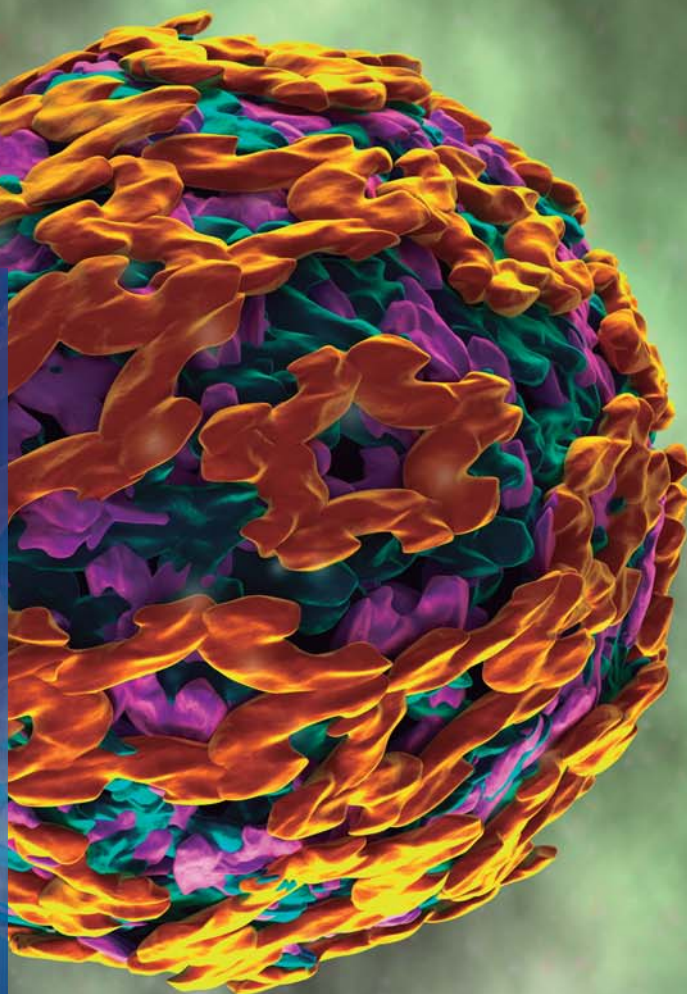
From 1 up to 96 samples per assay



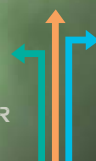
High sensibility, specificity and reproducibility



Validated according to ISO 13485 and CE marked

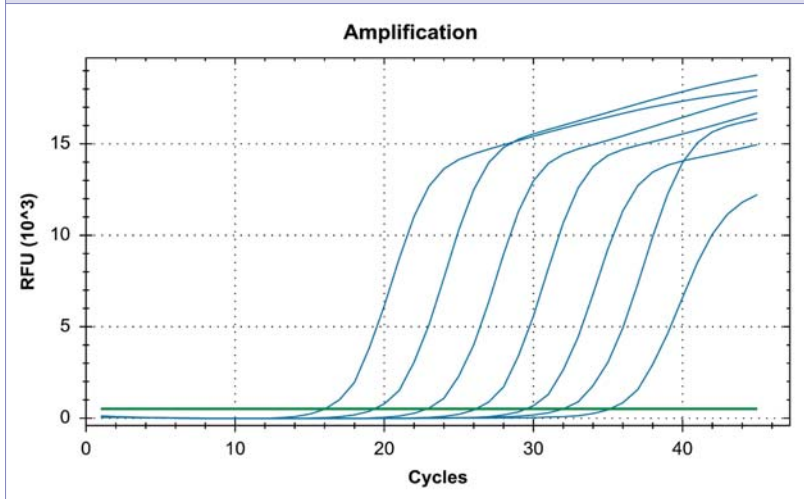


THE REAL ONE STEP qPCR



### Analytical sensitivity

**VIASURE** Yellow Fever Real Time PCR Detection Kit has a detection limit of  $\geq 10$  RNA copies per reaction.



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

### Components

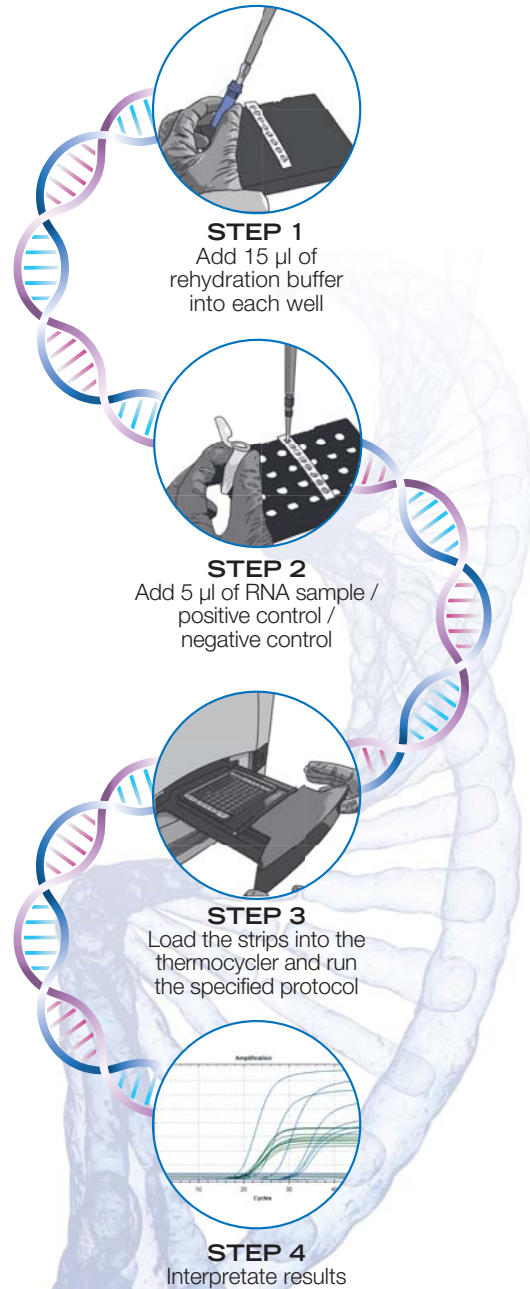
Reagent/Material	Description	Quantity
Yellow Fever 8-well strips	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	6/12 x 8-well strip
Rehydration Buffer	Solution to reconstitute the stabilized product	1 vial x 1,8 mL
Yellow Fever Positive Control	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

### Kit References

Reference	Description
VS-FEV106L	Viasure Yellow Fever Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-FEV106H	Viasure Yellow Fever Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-FEV112L	Viasure Yellow Fever Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-FEV112H	Viasure Yellow Fever Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-FEV113L	Viasure Yellow Fever Real Time PCR Detection Kit 96-well plate, low profile
VS-FEV113H	Viasure Yellow Fever Real Time PCR Detection Kit 96-well plate, high profile

### Work Flow

One-step rehydration of wells and add your extracted RNA



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