

# VIASURE

## *Chikungunya Virus* Real Time PCR Detection Kit

### Pathogen and product description

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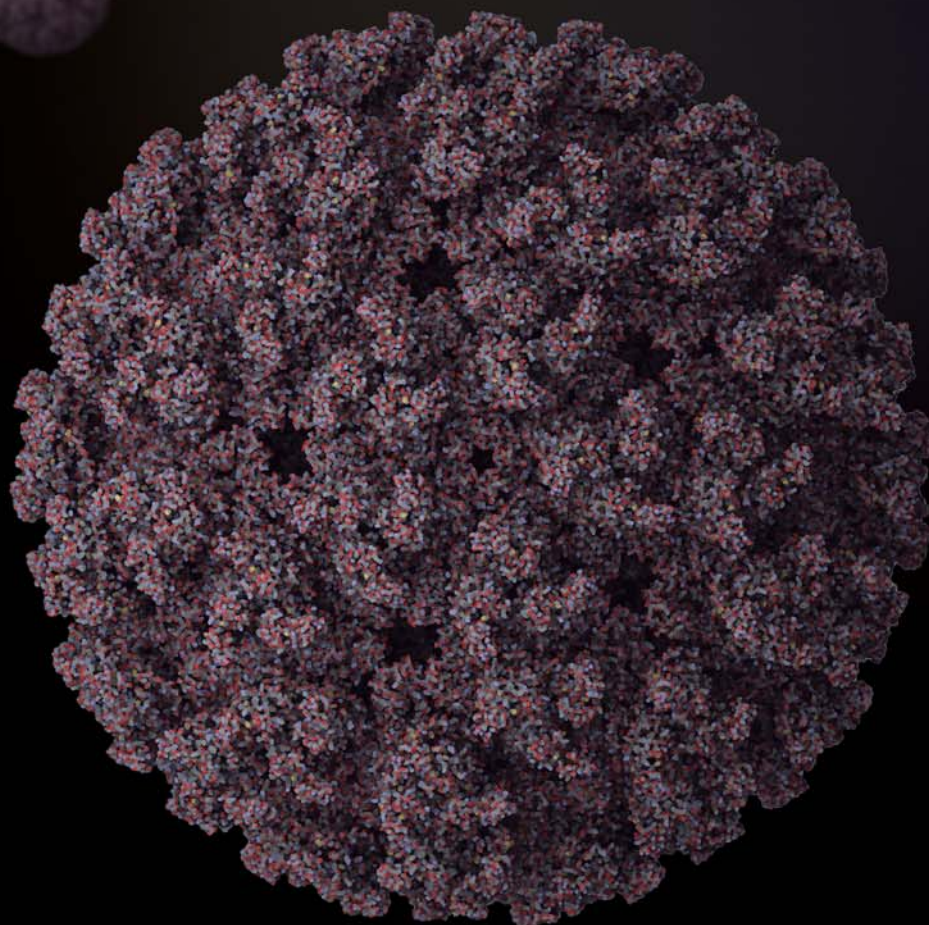
**C**hikungunya virus (CHIKV) belongs to the family *Togaviridae* and genus *Alphavirus*. This mosquito-borne virus has been implicated in explosive epidemics involving millions of persons in Africa, Asia, Europe, the South Pacific, and most recently the Americas.

Patients infected with this virus typically present acute onset of fever, myalgia, joint swelling and headache, and even sometimes conjunctivitis, maculopapular rash and/or gastrointestinal symptoms. Even though, the hallmark clinical symptom of CHIKV is a bilateral migratory arthralgia, often intense, affecting mainly the small joints of the extremities. Indeed, the persistence of joint pain and stiffness is the major long-term complication, which may last years after resolution of the initial infection.

Chikungunya virus (CHIKV) cannot be distinguishing from other human infections as Dengue fever and Zika virus infection,

other tropical and acute febrile diseases. Therefore, differential diagnosis for a patient with suspicious clinical symptoms who is living in or returning from a travel to an endemic area should be performed. In order to perform the real time RT-PCR assay, the specimen types that can be tested includes blood, serum, plasma, urine and fresh or formalin-fixed paraffin-embedded tissues.

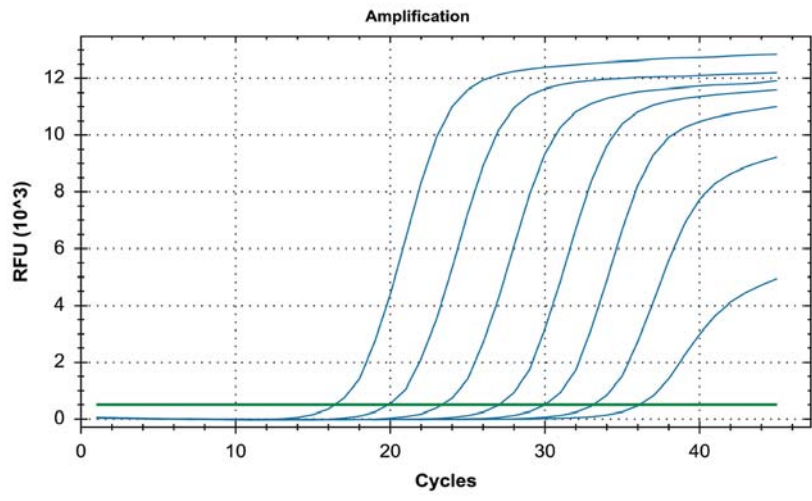
VIASURE *Chikungunya Virus* Real Time PCR Detection Kit is designed for the diagnosis of the Chikungunya virus in clinical samples. The detection is done in one step real time RT format where the reverse transcription and subsequent amplification of specific target sequence occur in the same reaction well. The isolated RNA target is transcribed generating complementary DNA by reverse transcriptase which is followed by the amplification of conserved region of the *NSP1* gene using specific primers and a fluorescent-labelled probe.





## Analytical sensitivity

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



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

## Components

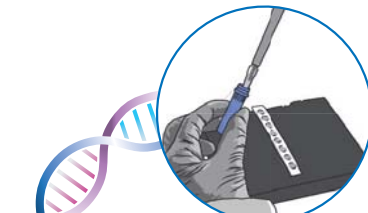
Reagent/Material	Description	Quantity
Chikungunya Virus 8-well strips	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	6/12 x 8-well strip
Chikungunya Virus 96-well plate	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	1 plate
Rehydration Buffer	Solution to reconstitute the stabilized product	1 vial x 1,8 mL
Chikungunya Virus 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-CHI106L	Viasure Chikungunya Virus Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-CHI106H	Viasure Chikungunya Virus Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-CHI112L	Viasure Chikungunya Virus Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-CHI112H	Viasure Chikungunya Virus Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-CHI113L	Viasure Chikungunya Virus Real Time PCR Detection Kit 96-well plate, low profile
VS-CHI113H	Viasure Chikungunya Virus Real Time PCR Detection Kit 96-well plate, high profile

## Work Flow

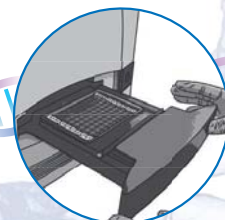
One-step rehydration of wells and add your extracted RNA



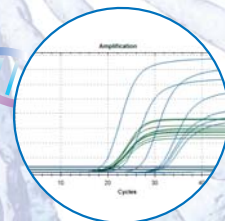
**STEP 1**  
Add 15  $\mu$ l of rehydration buffer into each well



**STEP 2**  
Add 5  $\mu$ 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