

## Chikungunya Virus (CHIKV) Detection by PCR



### Clinical Information :

Chikungunya virus (CHIKV) is a single-stranded RNA arbovirus that is transmitted to humans primarily by the ***Aedes aegypti* and *Aedes albopictus* mosquitoes**, which also transmit **dengue, yellow fever, and Zika viruses**.

Direct human-to-human transmission of CHIKV is uncommon, although transmission during pregnancy and delivery has been reported. CHIKV infection usually manifests as symptomatic illness with acute onset of high fever and debilitating polyarthralgia. Other symptoms include headache, skin rash, nausea and vomiting, and myalgia.

The incubation period, defined as the time from viral exposure to symptom onset, ranges from 1 to 12 days. Acute symptoms are typically self-limiting, lasting from 3 to 10 days.

Approximately **12% to 18% of affected individuals develop painful arthritis** that persists for several months to years. One study reported that up to 60% of patients' experienced persistent arthritis. **Laboratory testing is essential to distinguish CHIKV infection from other vector-borne infections with similar clinical features**, such as dengue fever, particularly in areas where local transmission is known to occur.

### Methodology: Reverse Transcriptase PCR (RT-PCR)

#### Interpretive Information:

A "detected" result indicates the presence of CHIKV RNA and is consistent with active infection.

A "not detected" result, on the other hand, is consistent with the absence of CHIKV RNA or with CHIKV RNA levels below the detectable limit of the assay.

Specimen: **EDTA Blood: 4 ML**

Turnaround Time: **48 hours**