**bp** BioPerfectus
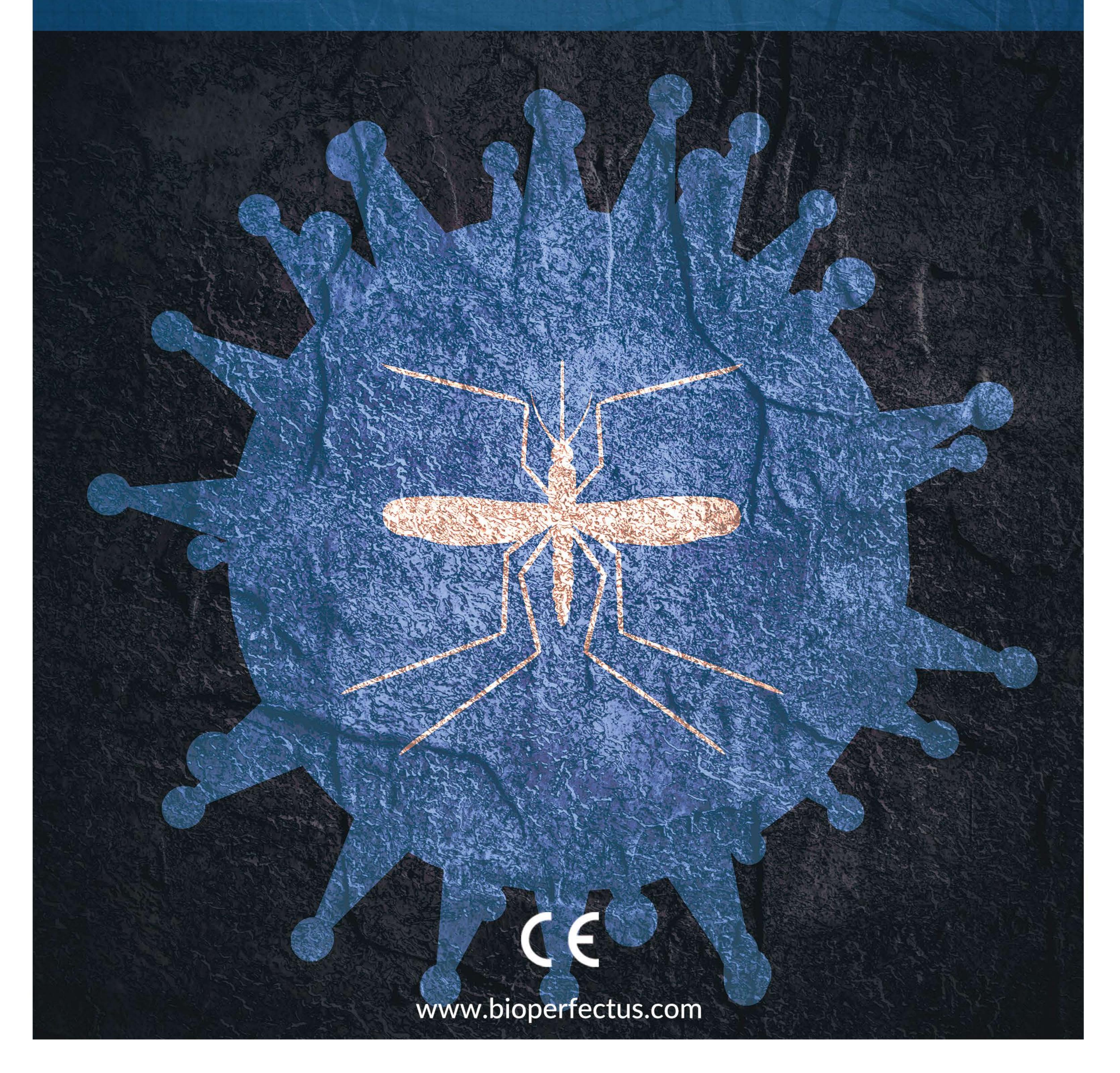
# DENGUE

## *solution*



CE

## BACKGROUND INFORMATION

Dengue is the most prevalent viral infection transmitted by Aedes mosquitoes. More than 3.9 billion people in over 129 countries are at risk of contracting dengue, with an estimated 96 million symptomatic cases and an estimated 40,000 deaths every year. The mosquito-borne virus can cause the onset of dengue fever in an individual which can develop into the more severe form of dengue hemorrhagic fever that causes plasma leakage. This fever can lead to a shock syndrome which can cause death in children and aged patients. The infection can be caused by any one of the serotypes of dengue viruses (DENV 1 to 4) which are generally carried by the female mosquito species Aedes aegypti.

## DETECTION METHOD

Several methods can be used for the diagnosis of DENV infection. These include **virological tests** (that directly detect elements of the virus, such as RT-PCR) and **serological tests**, which detect human-derived immune components that are produced in response to the virus. Depending on the progress of infectious, the laboratory could choose different diagnostic methods. Patient samples collected during the first week of illness should be tested by both serological (antigen, such as NS1) and virological methods (RT-PCR). Serological tests for immunoglobin can provide information of primary or secondary infection status.

## PRODUCT FEATURES

◆ **DIVERSIFIED PRODUCTS**
Satisfy serological and virological detection demands in whole infectious progress

◆ **QUICK RESULTS**
Get rapid test results within 15 minutes

◆ **QUICK RESULTS**
Get PCR results within 79 minutes on mainstream instruments

◆ **CERTIFICATES**
CE approved

## PACKAGING

| CATALOG | PRODUCT | PACKAGE |
|---------|---------|---------|
| SC20101W | Dengue NS1 Ag Rapid Test Kit | 20T/25T/50T |
| SC20201W | Dengue IgG/IgM Rapid Test Kit | 20T/25T/50T |
| SC20301W | Dengue (NS1 Ag+IgG/IgM) DUO Rapid Test Kit | 20T/25T/50T |
| JC30202NW | Dengue Virus Type 1 & Type 2 Real Time PCR Kit | 25T/50T |
| JC30203NW | Dengue Virus Type 3 & Type 4 Real Time PCR Kit | 25T/50T |
| JC30302NW | Zika Virus/Dengue Virus/Chikungunya Virus Real Time PCR Kit | 25T/50T |
| JC30101NW | Dengue Virus Real Time PCR Kit | 48T |

## Dengue NS1 Ag
## Rapid Test Kit

- Clinical sensitivity: 97.22%
- Clinical specificity: 99.35%
- Shelf life: 18 months
- Sample type: Human serum and plasma

## Dengue IgG/IgM
## Rapid Test Kit

- Clinical sensitivity:
  96.54% (IgM)
  87.29% (IgG)
  97.34% (IgG&IgM)

- Clinical specificity:
  98.82% (IgM)
  97.45% (IgG)
  98.13% (IgG&IgM)

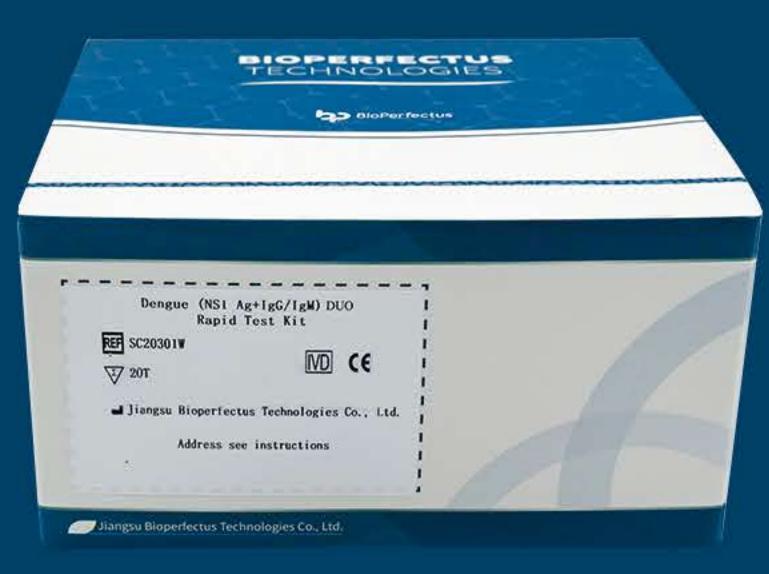- Shelf life: 18 months

- Sample type: Human serum and plasma

## Dengue (NS1 Ag+IgG/IgM) DUO
## Rapid Test Kit

- Clinical sensitivity:
  96.09% (NS1 Ag)
  96.37% (IgM&IgG)
  96.90% (NS1 Ag+IgG&IgM)

- Clinical specificity:
  99.37% (NS1 Ag)
  98.45% (IgM&IgG)
  99.05% (NS1 Ag+IgG&IgM)

- Shelf life: 18 months

- Sample type: Human serum and plasma

## Dengue Virus Type 1 & Type 2 Real Time PCR Kit

- Multiplex real-time PCR detect Dengue Virus Type 1 & Type 2
- LOD: 5 copies/reaction
- Sample type: Human whole blood, serum, plasma and urine

## Dengue Virus Type 3 & Type 4 Real Time PCR Kit

- Multiplex real-time PCR detect Dengue Virus Type 3 & Type 4
- LOD: 5 copies/reaction
- Sample type: Human whole blood, serum, plasma and urine





## Zika Virus/Dengue Virus/Chikungunya Virus Real Time PCR Kit

- Multiplex real-time PCR detect dengue, chikungunya and Zika viruses
- LOD: 5 copies/reaction
- Sample type: Human serum, whole blood (EDTA), cerebrospinal fluid (CSF), urine and amniotic fluid

## Dengue Virus Real Time PCR Kit

- Detection of Dengue virus, verified with DENV1/2/3/4 serotypes
- Limit of Detection: $1 \times 10^3 \, TCID_{50}/mL$
- Sample type: Human serum

# BioPerfectus

*A leading molecular diagnostic*

# solution provider

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