



# Dengue Diagnosis

Enzyme-linked immunosorbent assays for the qualitative detection of antibodies specific to Dengue virus

## PRODUCT FEATURES:

- Highest sensitivity- Antigen pool (DEN- 1, 2, 3, 4)
- User-friendly kits
- High performance and guaranteed stability with lyophilized conjugates when necessary
- Coloured, ready-to-use liquid reagents
- Colour-coded plates with individual break-apart wells
- Suitable for any open ELISA automated system
- MAC capture technique for IgM detection
- CE marked products (IVD)



G1018 DENGUE ELISA IgG  
M1018 DENGUE ELISA IgM CAPTURE

Dengue fever (DF) and dengue hemorrhagic fever (DHF) are caused by one of four closely related, but antigenically distinct, virus serotypes (DEN-1, DEN-2, DEN-3, and DEN-4), of the genus *Flavivirus*.

DF and DHF are diseases primarily of tropical and sub tropical areas, and the four different dengue serotypes are maintained in a cycle that involves humans and the *Aedes* mosquito.

Infections produce a spectrum of clinical illness ranging from a nonspecific viral syndrome to severe and fatal hemorrhagic disease. Clinical manifestations include rash, sudden onset of fever, chills, severe headache, nausea, myalgias and arthralgias, leukopenia, thrombocytopenia and hemorrhagic manifestations. It occasionally produces shock and hemorrhage, leading to death. Important risk factors for DHF include the strain of the infecting virus, as well as the age, and especially the prior dengue infection history of the patient.

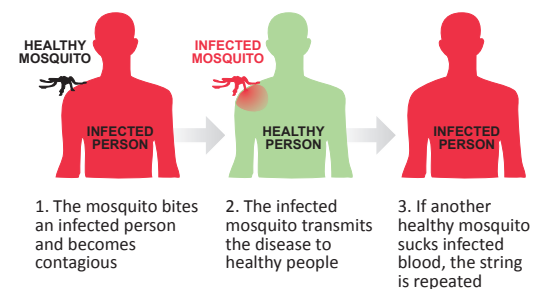
Serologically, a primary infection with dengue virus results in detectable levels of IgM antibodies by the third afebrile day after infection. These IgM antibodies persist for 1–2 months after infection. IgG antibodies are detected approximately 14 days after onset of primary infections. Secondary infections with dengue virus are characterized by a rapid increase in IgG antibody levels. Owing to the relatively late increase in antibody levels to a concentration that can be detected diagnostically, a negative result for an antibody test early in the course of disease is not definitive. Specimens should be collected at least 7 days after the onset of symptoms in order to rule out the possibility of an acute infection with dengue virus.

Serology is the most widely applied method used in routine diagnosis. Traditionally, hemagglutination inhibition and virus neutralization tests have been used. At present ELISAs for IgM and IgG antibodies are the standards for the serological analysis of dengue virus infections, as they are simple and allow large numbers of samples to be tested.

## AREAS AT RISK OF DENGUE TRANSMISSION



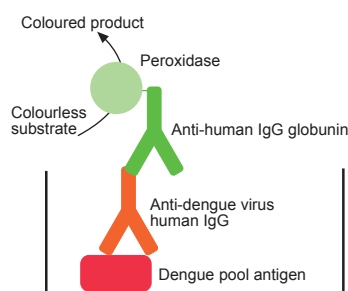
## HOW THE VIRUS IS TRANSMITTED



## TEST PRINCIPLE AND PERFORMANCE:

### DENGUE ELISA IgG:

Sensitivity 98%, Specificity 100%  
(169 samples tested)



### DENGUE ELISA IgM CAPTURE:

Sensitivity 98%, Specificity 99%  
(196 samples tested)

