

# One Step Dengue NS1 Ag Test

(Whole Blood/Serum/Plasma)

FOR PROFESSIONAL IN VITRO DIAGNOSTIC USE ONLY

## Intended Use

The One Step Dengue NS1 Ag Test is a rapid chromatographic immunoassay for the qualitative detection of dengue virus NS1 antigen in Whole Blood /Serum / Plasma to aid in the diagnosis of Dengue viral infection.

## Summary

Dengue is transmitted by the bite of an Aedes mosquito infected with any one of the four dengue viruses. It occurs in tropical and sub-tropical areas of the world. Symptoms appear 3—14 days after the infective bite. Dengue fever is a febrile illness that affects infants, young children and adults. Dengue haemorrhagic fever (fever, abdominal pain, vomiting, bleeding) is a potentially lethal complication, affecting mainly children. Early clinical diagnosis and careful clinical management by experienced physicians and nurses increase survival of patients. One step Dengue NS1 Ag Test is a simple, visual qualitative test that detects dengue virus NS1 antigen in human Whole Blood/serum/plasma. The test is based on immunochromatography and can give a result within 15 minutes.

## Principle

The One Step Dengue NS1 Ag Test is a qualitative membrane strip based immunoassay for the detection of dengue virus NS1 antigen in Whole Blood /Serum / Plasma. In this test procedure, anti-Dengue NS1 antibody is immobilized in the test line region of the device. After a Whole Blood /Serum / Plasma specimen is placed in the specimen well, it reacts with anti-Dengue NS1 antibody coated particles that have been applied to the specimen pad. This mixture migrates chromatographically along the length of the test strip and interacts with the immobilized anti-Dengue NS1 antibody. If the specimen contains dengue virus NS1 antigen, a colored line will appear in the test line region indicating a positive result. If the specimen does not contain dengue virus NS1 antigen, a colored line will not appear in this region indicating a negative result. To serve as a procedural control, a colored line will always appear at the control line region indicating that proper volume of specimen has been added and membrane wicking has occurred.

## Storage and Stability

- Store as packaged in the sealed pouch at room temperature or refrigerated (2-30°C or

40-86°F ). The test device is stable through the expiration date printed on the sealed pouch.

- The test must remain in the sealed pouch until use.

## Additional Special Equipment

### Materials Provided

- Test devices
- Disposable specimen droppers
- Buffer (for whole blood only)
- Package insert

### Materials Required But Not Provided

- Timer
- Centrifuge
- Specimen collection containers

## Precautions

- For professional in vitro diagnostic use only. Do not use after expiration date.
- Do not eat, drink or smoke in the area where the specimens and kits are handled.
- Handle all specimens as if they contain infectious agents.
- Observe established precautions against microbiological hazards throughout all procedures and follow the standard procedures for proper disposal of specimens.
- Wear protective clothing such as laboratory coats, disposable gloves and eye protection when specimens are assayed.
- Follow standard biosafety guidelines for handling and disposal of potential infective material.
- Humidity and temperature can adversely affect results.

## Specimen Collection and Preparation

- The One Step Dengue NS1 Ag Test can be performed used on Whole Blood /Serum / Plasma.
- To collect whole blood, serum or plasma specimens following regular clinical laboratory procedures.
- Separate serum or plasma from blood as soon as possible to avoid hemolysis. Use only clear non-hemolyzed specimens.
- Testing should be performed immediately after specimen collection. Do not leave the specimens at room temperature for prolonged periods. Serum and plasma specimens may be stored at 2-8°C for up to 3 days. For long term storage, specimens should be kept below -20°C. Whole blood should be stored at 2-8°C if the test is to be run within 2 days of collection. Do not freeze whole blood specimens.
- Bring specimens to room temperature prior to testing. Frozen specimens must be completely thawed and mixed well prior to testing. Specimens should not be frozen and thawed repeatedly.