Laboratory Preparedness and Response Branch
Biological Response Section

Specimen Requirements for Real-Time (rti) Reverse-Transcriptase Polymerase Chain Reaction (RT-PCR) for Dengue Virus Serotypes 1-4 in Clinical Samples

Methodology:	CDC Dengue (DENV-1-4) Real-Time RT-PCR Assay
Performed:	The CDC DENV-1-4 Real-Time RT-PCR Assay is an FDA approved assay developed by the CDC for In-Vitro Diagnostic use (IVD).
Criteria for testing:	Clinical signs and symptoms compatible with Dengue virus infection and/or specimens meeting the case definition set by the Disease Investigation Branch (DIB) of the Disease Outbreak Control Division (DOCD) of the Department of Health (DOH).
Turn-Around-Time:	Results are reported 2-3 business days after approval and receipt of specimen(s). For Specimens submitted by the USAPI: Results for outbreak related specimens are reported 3-4 business days from receipt of suitable specimen(s). Results for surveillance samples are reported 5-7 business days from receipt of suitable specimen(s). Dengue typing requests for Dengue positive samples by the Trioplex PCR method will be batched.
Specimen type required:	Venous blood sample: Follow device manufacturer's instructions for proper serum or plasma collection and separation. Serum is the preferred specimen. The best type of tube is serum separator (tiger/speckled-top). Red-top (no additives) is also acceptable. For plasma specimens, use sodium citrate collection tube. Do not use heparin (green top) or EDTA (purple top). A minimum of 0.5 ml serum or plasma is required. Dengue specimens must be collected within the first eight (8) days from onset of signs and symptoms.
Specimen storage/transport:	Refrigerate serum or plasma at 4°C or maintain on ice for no longer than 24 hours. If storage/transport will exceed 24 hours, freeze serum or plasma at -20°C or lower.

	Requisition forms shall be placed in a separate bag and shall not be packed with the specimen(s).
Normal Value:	No Dengue Virus Nucleic Acid Detected
Result Notification:	Laboratory reports are electronically relayed to the submitters via the SLD dashboard. An automatic notification will be relayed when a report is available on the SLD dashboard. Laboratories who do not receive automatic notification will be notified by e-mail on the availability of results on the SLD Dashboard. Submitters who do not have access to electronic reports will be notified via fax or by encrypted e-mail.
Test performed at:	Biological Response Section (BRS) Laboratory Preparedness and Response Branch (LPRB) State Laboratories Division Department of Health 2725 Waimano Home Road Pearl City, Hawaii 96782
Contact:	Remedios Gose at (808) 453-5993 or (808) 554-9992 or Cheryl Daquip at (808) 453-5984 or (808) 453-6641

Reviewed By:

Remedios B. Gose — 12/4/15

Remedios B. Gose, MSPH, RM (NRCM)
Laboratory Preparedness and Response Branch Chief

Date

Approved By:

Edward P. Desmond — 12/4/2019

Edward Desmond, Ph.D.
Administrator, State Laboratories Division

Date