Laboratory Preparedness and Response Branch
Biological Response Section

Specimen Requirements for Chikungunya Virus IgM Capture ELISA

Methodology:	IgM Antibody Capture (MAC) Enzyme-Linked Immunosorbent Assay (ELISA)
Performed:	IgM antibody Capture ELISA (MAC-ELISA) is used to detect viral specific IgM antibodies to Chikungunya virus produced toward the end of the first week of illness. **Only specimens meeting the case definition established by the Centers for Disease Control & Prevention (CDC) and the Disease Investigation Branch (DIB) of the Disease Outbreak and Control Division (DOCD) of the Department of Health (DOH) will be tested.**
Turn-Around-Time:	Results are reported 5-7 business days after DIB approval and receipt of specimen.
Specimen type required:	Generally, the test of choice >5 days after onset of symptoms is IgM antibody. PCR is the test of choice ≤ 5 days. Convalescent serum specimens may be of value, especially if acute serum is negative and there is high clinical suspicion. Serum specimens with Equivocal Chikungunya PCR results may reflex to IgM antibody testing. On a case by case basis, specimens submitted for Chikungunya PCR testing may also be tested for IgM antibody. Prior approval by the Epidemiologist investigator(s) or the State Laboratory Division (SLD) Laboratory Director is required.
Specimen Collection:	A minimum of one (1) ml of serum is required for the ELISA test. Whole blood will **not be accepted**. Heparin (green top) and EDTA (purple top) **<u>are unsuitable</u>** for testing. Chikungunya virus antibodies normally develop toward the end of the first week of illness. Acute serum should be taken 3-7 days after onset of symptoms.

Requisition Form:	Each specimen submitted must have a completed SLD Form 81.3. Submitter is responsible for completing SLD Form 81.3 including but not limited to the following information: at least two patient unique identifiers, date of onset of illness, signs and symptoms, travel history, immunization history, test(s) requested, name and address of submitter. Requisition forms shall be placed in a separate bag and shall not be packed with the specimen(s).
Normal Value:	No IgM antibodies to Chikungunya virus 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 — 12/4/19

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

Approved By:

Edward P. Desmond — 12/4/2019

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