

Test Menu

TOPIC	DESCRIPTION
Test Name	Arbovirus, PCR
Other Name (s)	Real-time PCR, RT-PCR, real-time RT-PCR, nucleic acid amplification testing (NAAT)
Analyte(s)	eastern equine encephalitis (EEE), St. Louis encephalitis (SLE), dengue (DEN), West Nile (WN), chikungunya (CHIK), Zika (ZIK), yellow fever (YF), and Mayaro (MAY)
Test Code	1532, 1550, 1682, 1686, 1688, 1689
Lab location	Tampa, Miami, Jacksonville locations. Miami only tests for dengue, chikungunya, and Zika.
Department	Virology
Prior Authorization	Requires prior approval from Regional Epidemiology and notification to the testing lab. Contact local County Health Department to start the process for approval.
Required Forms	Test Requisition Form, DH1847. Medical History needed (i.e. onset date, collection date, travel history, symptoms and tick bite history).
Specimen Sources	Whole blood, CSF, tissue, serum, urine, and amniotic fluid
Supplemental Information- Special Specimen Preparation	N/A
Minimum Volume	1mL, 3-5mL Preferred.
Storage Conditions	Refrigerate specimens at 2-8°C or frozen at ≤-20°C.
Collection Media	Whole blood in EDTA, sterile container
Specimen Labeling	-Specimen must be labeled with at least two unique patient identifiers, Ex: Name and DOB. -The collection date and time if submitting multiple specimens. -Information on the specimen must match the requisition.
Packaging and Shipping Instructions and Handling	CSF, tissue, serum, urine, and amniotic fluid: Specimens must be shipped between (2-8°C) or frozen (≤-20°C) on dry ice. Whole blood in EDTA: ship between 2-8°C on gel ice packs. Separate multiple specimens into different bags (preferred).
Test Methodology	Real-time reverse-transcription polymerase chain reaction (RT-PCR) assay.
Turnaround Time	3 - 10 days
Result Indicator	No virus detected or name of virus detected
Unsatisfactory Specimen	Unlabeled or mislabeled specimens, insufficient quantity for testing, incorrect collection tube/transport media, grossly contaminated specimen, disparity between ID on sample and paperwork, improper collection, storage or transport of specimen, no test requested, test requested is not performed. If required, absence of patient history. If required, lack of patient history compatibly with test requested. Test order cancelled by provider, broken or leaked in transit, etc.
Interferences and Limitations	Interpretation of rRT-PCR test results must account for the possibility of false-negative results. False-negative results can arise from: poor sample collection, degradation of viral RNA during shipping or storage, specimen collection conducted prior to symptom onset, specimen collection after nucleic acid can no longer be found in the patient (approximately 14 days post-onset of symptoms for serum, whole blood, and/or urine.)
Additional Information & Notes	Date of onset, mosquito exposure, clinical symptoms, and recent travel history is required. Requires prior arrangement with testing lab. Trioplex PCR assay tests for dengue, chikungunya, and zika in one test from acute serum, whole blood in EDTA, CSF, urine, and amniotic fluid. Serum collected less than 14 days post onset of symptoms or exposure. Whole blood in EDTA, CSF, urine, and amniotic fluid may only be tested alongside a patient-matched serum specimen. Amniotic fluid and urine are only approved for Zika (with paired serum). EEE, SLE, WN CSF, biopsy or autopsy brain tissue; frozen. Acute serum (less than 5 days post onset of symptoms) cold or frozen. YF, MAY acute serum.
Reference Range	N/A
Reference Lab	CDC if needed

Note: If this analysis is selected, regardless of the test code entered, the laboratorian will determine which analytes to run based on the current algorithm and the patient’s medical history.