Lab Dept: Microbiology/Virology

Test Name: ENTEROVIRUS RNA DETECTION PCR, OTHER SOURCES

General Information

Lab Order Codes:	ENTP
Synonyms:	Enterovirus RT PCR; PCR for Enterovirus; Coxsackievirus; Echovirus; Hand, Foot and Mouth Disease
CPT Codes:	87498 – Enterovirus, amplified probe technique
Test Includes:	Detection of enterovirus by Real-Time Polymerase Chain Reaction (PCR)/RNA Probe Hybridization

Logistics

Lab Testing Sections:	Microbiology/Virology Sendouts
Referred to:	Mayo Clinic Laboratories (MML: LENT)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily
Turnaround Time:	2 - 3 days
Special Instructions:	Requisition must state specific site of specimen and date/time of collection.

Specimen

Specimen Type:	Body Fluid (Pericardial, Peritoneal, Pleural); CSF (spinal fluild); Respiratory (Bronchial washing; bronchoalveolar lavage; nasopharyngeal aspirate or washing; pleural fluid; sputum; or tracheal aspirate); Swab (Dermal; Eye; Rectal; Genital; Nasopharyngeal; Throat; Nasal or Urethral)
Container:	**Body Fluid**: Sterile container **Swab**: Culturette BBL, Multimicrobe media (M4-RT, M4, or M5) and ESwabs

Collection:	**Other Sources**: Specific to site with sterile technique as directed by physician. CSF is recommended from vial #2. **Note:** Rectal swabs must have NO VISIBLE stool. Volume: **CSF**: 0.5 mL (Minimum: 0.3 mL) **Other Body Fluid**: 0.5 mL (Minimum: 0.5 mL) **Respiratory specimen**: 1.5 mL (Minimum: 0.5 mL)
Special Processing:	Lab staff: Do not centrifuge. Send specimen refrigerated in a screw-capped sterile vial or other collection container specified above. Maintain sterility and forward promptly. The high sensitivity of amplification by PCR requires the specimen be processed in an environment in which contamination of the specimen not likely. Specimen stable refrigerated (preferred) or frozen for 7 days.
Sample Rejection:	Specimen submitted in a non-sterile or leaking transport container; improperly labeled specimen; insufficient volume; samples exposed to repeated freeze/thaw cycles; prolonged transport time; improper storage conditions. If an unacceptable specimen is received, the physician or nursing station will be notified.

Interpretive

Reference Range:	Negative A positive result indicates the presence of enterovirus RNA in the specimen.
Critical Result:	As defined by reference lab.
Limitations:	A negative result does not rule out the possibility of enterovirus infection in the CNS. This assay may detect virus from a variety of specimen types in asymptomatic individuals. This assay should only be used for patients with a clinical history and symptoms consistent with enterovirus infection, and must be interpreted in the context of the clinical picture. This test should not be used to screen asymptomatic patients. This is a qualitative assay and results are reported as either negative or positive for targeted enterovirus RNA.
Methodology:	Real-Time Polymerase Chain Reaction (PCR)/RNA Probe Hybridization
Additional Information:	See Mayo's catalog for further details.
References:	Mayo Clinic Laboratories November 2023

Updates:	7/7/2015: Added information or additional specimen sources (Body fluid, Respiratory, Swab) 5/26/2020: Removed respiratory specimens as possible sources for testing. 6/16/2020: Updated sources. CSF now performed internally. 12/15/2022: Respiratory specimens are now acceptable sources. 11/13/2023: Updated specimen volumes, added specimen stability, updated methodology; updated turnaround time.