
Lab Dept: Microbiology/Virology

Test Name: CMV BY PCR, FLUID, TISSUE OR BONE MARROW

General Information

Lab Order Codes: PCRC

Synonyms: Cytomegalovirus (CMV) detection by Polymerase Chain Reaction (PCR), Spinal Fluid, Tissue or Bone Marrow; CMV Detection by Real-Time PCR;

CPT Codes: 87496 - Infectious agent detection by nucleic acid (DNA or RNA); cytomegalovirus, amplified probe technique

Test Includes: Detection of CMV by Real-Time PCR reported as positive or negative.

Logistics

Test Indications: Useful for early and sensitive detection of CMV infection in the spinal fluid and other body fluids for intervention in the management of CMV infections in acquired immunodeficiency syndrome and transplant patients and in other immunosuppressed patients in whom CMV viremia is suspected.

Lab Testing Sections: Microbiology - Sendouts

Referred to: Mayo Medical Laboratories (Test: 81240/LCMV)

Phone Number: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 3 days; test set up Monday - Saturday

Special Instructions: Specimens grossly contaminated with blood may inhibit the PCR and produce false negative results.

Specimen

Specimen Type: CSF, Body fluid, Throat, Dermal, Genital, Eye, Tissue, Urine, Bone Marrow

Container:	<p>Body Fluid, Respiratory Specimen, CSF, Urine: Sterile container</p> <p>Swab (Dermal, genital, eye or throat): Culture transport swab (Note: Calcium alginate-tipped swab, wood swab, or transports swabs containing gel are NOT acceptable)</p> <p>Tissue: Sterile container containing 1-2 mL of sterile saline or multi-microbe medium (M5)</p> <p>Bone Marrow: Sterile container or lavender tube</p>
Draw Volume:	<p>Body Fluid/Bone Marrow: 0.5 mL (Minimum: 0.3 mL)</p> <p>Respiratory Specimen: 1.5 mL bronchial washing, bronchioalveolar lavage, nasopharyngeal aspirate or washing, sputum, or tracheal aspirate</p> <p>Throat, dermal, eye, genital swab: Swabbed specimen, place back into swab cylinder after collection</p> <p>Tissue (brain, colon, kidney, liver, lung, etc): Fresh tissue portion</p> <p>Urine: 2 mL (Minimum: 0.3 mL) from a random collection</p>
Processed Volume:	Same as Draw Volume
Collection:	Aseptic collection technique, deliver to the laboratory immediately after collection. Avoid hemolysis. Specify specific specimen source.
Special Processing:	<p>Lab Staff: Send specimen refrigerated in a screw-capped sterile vial or other collection container specified above. Maintain sterility and forward promptly.</p> <p>The high sensitivity of amplification by PCR requires the specimen to be processed in an environment in which contamination of the specimen by CMV DNA is not likely.</p>
Patient Preparation:	None
Sample Rejection:	Improperly labeled specimen. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range:	Negative. If positive, reported as CMV DNA detected
Critical Values:	Positive
Limitations:	A negative result does not eliminate the possibility of CMV infection of the CNS.

Methodology: Real-Time Polymerase Chain Reaction (PCR is utilized pursuant to a license agreement with Roche Molecular Systems, Inc.)

References: [Mayo Medical Laboratories](#) June 2013

Updates: 8/31/2010: Test expanded to include other specimen types beyond CSF.