
Lab Dept: Microbiology/Virology

Test Name: CMV BY PCR, BLOOD

General Information

Lab Order Codes: CMVQU

Synonyms: Cytomegalovirus PCR

CPT Codes: 87497 - Infectious agent detection by nucleic acid (DNA or RNA); cytomegalovirus amplified probe technique

Test Includes: CMV detection by PCR. This test **does not** include CMV Culture. Refer to [Viral Culture](#).

Logistics

Test Indications: Early detection of CMV viremia. Monitoring CMV disease progression and response to antiviral therapy.

Lab Testing Sections: Microbiology/Serology - Sendouts

Referred to: Mayo Medical Laboratories (Test: CMVQN)

Phone Numbers: 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: N/A

Specimen

Specimen Type: Blood

Container: Lavender top (EDTA) tube

Draw Volume: 4.5 mL (Minimum: 1.8 mL) blood

Processed Volume: 1.5 mL (Minimum: 0.6 mL) plasma

Collection: Routine blood collection, invert gently to mix.

Special Processing:	Lab Staff: Centrifuge specimen, remove plasma aliquot into a screw-capped plastic vial. Store and ship at frozen temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than plasma; mislabeled specimens or unlabeled specimens

Interpretive

Reference Range: Undetected

A positive test result indicates presence of CMV DNA; a quantitative value (IU/mL) is reported.

A result of "Undetected" does not rule out the presence of CMV DNA. This test should not be used as the only criterion to form a clinical conclusion, instead, results should be correlated with other test results, patient symptoms, and clinical presentation.

Limitations: Cytomegalovirus (CMV) viral load results generated with this assay may be higher (up to 1.00 log IU/mL) than those from the previous Cobas Ampliprep/Cobas Taqman CMV Test (Roche Molecular Systems, Inc.), due to the differences in sensitivity of the assays.

Mutations within the highly-conserved regions of the CMV DNA polymerase (UL54) gene covered by cobas CMV may affect primers or probe binding resulting in the under-quantitation of virus or failure to detect the presence of virus. The cobas CMV assay mitigates this risk through the use of redundant CMV target sequence amplification primers.

Methodology: Real-Time Reverse Transcription-Polymerase Chain Reaction (RT-PCR)

Additional Information: CMV may be present in the blood in healthy seropositive individuals at very low levels. CMV serology may confirm current infection.

References: [Mayo Medical Laboratories Web](#) August 2018

Updates:
3/18/2004: Test moved from Eastern Virginia Medical School Department of Pathology to Mayo Medical Laboratories.
6/3/2013: Method change, previously listed as Real-Time PCR/DNA Probe Hybridization
8/19/2015: Draw volume change
8/3/2013: Draw volume change, updated PCR method.