
Lab Dept: Microbiology/Virology

Test Name: EBV DNA DETECTION BY PCR

General Information

Lab Order Codes: EBPC

Synonyms: Epstein-Barr Virus DNA Detection by Polymerase Chain Reaction, Quantitative Blood

CPT Codes: 87799 – Infectious agent detection by nucleic acid, quantification, each organism

Test Includes: Detection of EBV using LightCycler Polymerase Chain Reaction.

Logistics

Test Indications: Quantitative PCR for EBV-DNA in blood is intended as a prospective and diagnostic marker for the development of post-transplant lymphoproliferative disorders.

Lab Testing Sections: Microbiology/Virology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: 82987/QEBC)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 3 days

Special Instructions: N/A

Specimen

Specimen Type: Whole blood

Container: Lavender top (EDTA) tube

Draw Volume: 5 mL (Minimum: 0.25 mL) blood

Processed Volume: Same as Draw Volume

Collection:	Routine venipuncture
Special Processing:	Lab Staff: Do Not centrifuge. Submit whole blood in original collection container. Store and ship at refrigerated temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than EDTA whole blood, hemolysis; mislabeled or unlabeled specimens

Interpretive

Reference Range:	None detected Increasing copy levels of EBV DNA in serial specimens may indicate positive post-transplant lymphoproliferative disorders (PTLD). Immunocompromised individuals with past-reactivated EBV infections who do not develop PTLD have low levels (< or = 40 copies/mL), whereas increasing levels from baseline and/or initially high levels (> or = 200 copies/mL) of viral DNA may be an early indicator of this condition. Positive results are quantitated in copies/mL.
Critical Values:	N/A
Limitations:	Serial determination of blood specimens from patients may be necessary to monitor increasing or decreasing levels of EBV-DNA. Reportable range is 500 copies/mL to 100,000,000 copies/mL. Specimens with results <5,000 copies EBV DNA/mL include a disclaimer that states: "Results may not be reproducible due to low copy number." Blood specimens of normal blood donors for EBV infection usually have low or undetectable levels of viral DNA.
Methodology:	LightCycler Polymerase Chain Reaction (PCR) PCR is utilized pursuant to a license agreement with Roche Molecular Systems, Inc.
References:	Mayo Medical Laboratories Web Page October 2014
Updates:	3/4/2004: Test moved from Lab Corp (Viromed) to Mayo Medical Laboratories. 3/11/2005: Interpretation info added to reference range field.