

EBV Quantitative Real-time DNA PCR

Test ID 4500 Epstein-Barr (EBV) Real-time qPCR

Clinical Utility EBV is the etiologic agent of most post-transplant lymphoproliferative disorder (PTLD), which is an important cause of morbidity and mortality in both solid organ transplant recipients and HSCT patients. PTLD results from uncontrolled EBV-induced proliferation of B-cells in the immunocompromised setting. Quantitative EBV DNA PCR can be used to aid in the early diagnosis of PTLD, track the course of the disease, and monitor response to treatment.

Procedure ViraCor's assay design includes dual-gene targets to account for viral mutations, which dramatically reduces the chance of false negative results. Extraction of EBV viral DNA from plasma, CSF, urine, other biological fluids, or tissues followed by amplification and detection using real-time, quantitative PCR. An internal control is added to ensure the extraction was performed correctly and the PCR reaction was not inhibited.

Specimens
Whole Blood: 3-5 ml submitted in an EDTA tube; ship ambient.
CSF: 1 ml fluid frozen; submitted in a sterile, leakproof tube; ship on dry ice.
BAL: 1-4 ml submitted in a sterile, leakproof tube; ship ambient.
Other: Please inquire.

Specificity The primers and probes used in this assay are specific for known EBV strains based on similarity search algorithms. Additionally, no cross reactivity was detected when tested against adenoviruses, BKV, CMV, HSV-1, HSV-2, HHV-6 variant A, HHV-6 variant B, HHV-7, HHV-8, JCV, parvovirus B19, SV-40, and VZV.

Assay Range 100 copies/ml to 1×10^{10} copies/ml

Turnaround Time Within 24 hours of receiving specimen

PCR tests are performed pursuant to a license agreement with Roche Molecular Systems, Inc.

This assay was developed and the performance characteristics were determined at ViraCor Laboratories. This test is performed in a CLIA certified laboratory. FDA approval is not required for the performance of this test.

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