

BK Virus Quantitative Real-time DNA PCR

Test ID 2500 BKV Real-time qPCR

Clinical Utility BKV has emerged as an important pathogen in nephropathy in kidney transplant patients and hemorrhagic cystitis in HSCT patients. Early diagnosis of BK nephropathy has been shown to positively impact organ survival. Early diagnosis can be accomplished through a regular monitoring program for reactivation of BKV. Monitoring is effectively accomplished through the use of quantitative BKV DNA PCR of both blood and urine specimens. Quantitative PCR can also be used to track the course of infection 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 BK 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 **Serial monitoring of blood and urine is recommended.**
Whole Blood: 3-5 ml submitted in an EDTA tube; ship ambient.
Urine: 5 ml submitted in a sterile urinalysis container; ship ambient.
Other: Please inquire.

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

Assay Range 500 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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