

Cell Culture Bulletin



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This **annual newsletter** highlights advances in the cell culture industry and new offerings from **ViroMed Laboratories**, a LabCorp Center of Excellence.

ViroMed to Present Posters at Clinical Virology Symposium

ViroMed Laboratories' scientists conduct research throughout the year to develop innovative technology applications. ViroMed will present the 2 posters described below at the 25th Annual Clinical Virology Symposium (CVS) in Daytona Beach, Florida, April 19-22, 2009.

Performance Characteristics of a MultiCode-RTx[®] PCR Assay for the Quantitative Detection of BK Virus DNA in Plasma, Serum, and Urine

**Kalpana Ramachandran and Charles P. Cartwright
ViroMed (LabCorp) Laboratories, Minnetonka, MN**

Quantitative monitoring of BK viral load is an important component in managing patients at risk for developing disease caused by reactivation of this virus. We report here on the performance characteristics of a quantitative PCR assay for BKV (qBKV-PCR) that utilizes MultiCode-RTx[®] technology (EraGen Biosciences, Madison, WI) for detecting PCR products in real-time. One of the advantages of MultiCode-RTx[®] is that, since tagged-primers rather than probes are used for amplicon detection, amplification efficiency is the sole variable influencing the kinetics of signal generation resulting in improved precision of target quantitation. The qBKV-PCR assay described here enables multiplexed detection of BKV and an extractable internal control target. Quantitation is accomplished via interpolation of results into externally-generated, lot-specific calibration curves. We have established the analytical performance metrics of the qBKV-PCR assay, including the specimen-type specific lower limits of quantitation (LLOQ) and detection (LOD), and delineated the sample storage requirements, reproducibility, specificity, and internal control performance of this novel assay. The results of these experiments indicate this assay is capable of highly reproducible quantitation of BKV DNA in clinical samples over a range of at least 6 logs and generates results that are concordant with currently available reference materials for BKV.

Performance Characteristics of a MultiCode-RTx[®] PCR Assay for the Quantitative Detection of Epstein-Barr Virus DNA in Peripheral Blood Samples

**Kalpana Ramachandran, Amanda Pherson,
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The development of EBV-associated post-transplant lymphoproliferative disorder (PTLD) is a serious complication in solid organ and bonemarrow transplant recipients. Monitoring for the presence of circulating EBV-DNA by PCR is frequently used as an aid in assessing the risk of PTLTD development in susceptible individuals. We report here on the performance characteristics of a quantitative PCR assay for EBV (qEBV-PCR) that utilizes MultiCode-RTx[®] technology (EraGen Biosciences, Madison, WI) for detecting PCR products in real-time. One of the advantages of MultiCode-RTx[®] is that, since tagged-primers rather than probes are used for amplicon detection, amplification efficiency is the sole variable influencing the kinetics of signal generation resulting in improved precision of target quantitation. The qEBV-PCR assay described here enables multiplexed detection of EBV-DNA and an extractable internal control target. Quantitation is accomplished via interpolation of results into externally-generated, lot-specific calibration curves, and latently EBV-infected lymphoblastoid cells are used to generate quantitative, extractable control material. The assay has been optimized to provide reproducible quantitation at low target concentrations; and the analytical performance metrics of the qEBV-PCR assay, including the specimen-type specific lower limits of quantitation (LLOQ) and detection (LOD), sample storage requirements, reproducibility, specificity, and internal control performance of this novel assay are described. The results of these experiments indicate this assay is capable of highly reproducible quantitation of EBV-DNA in peripheral blood.

New Cell Culture Catalog Provides Easy-to-Use Format

We've updated our cell culture products catalog to make it more user-friendly. The 2009 catalog contains a new cell line table that makes it easy to find available sizes and formats and determine ordering codes. The new catalog also provides the latest information about cell lines, media, red blood cells, and detection products available from ViroMed Laboratories.

Please pick up a new cell culture products catalog at our Clinical Virology Symposium (CVS) booth in Daytona Beach, Florida, April 19-22, 2009. Clients can also order catalogs by calling ViroMed account management at 800-582-0077, ext. 4163, or e-mailing ViroMed_AcctMgmt@LabCorp.com.

Client Survey Coming This Summer

Watch your mail this summer for ViroMed's cell culture products survey. When the survey arrives, please complete and return it to the fax number provided on the form. We appreciate your taking the time to provide feedback. We remain committed to providing the highest quality cell culture products and services to meet your laboratory's needs today and in the future, and we encourage you to contact us any time to share your comments.

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Please have your account number available when contacting ViroMed to ensure inquiries can be addressed as promptly as possible. Your account number is located on packing slips and price agreements.



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