

BK Virus (MM Strain) Quantitated Viral DNA

Catalog Number: 08-942-250

Lot Number: E0602-4

Product Description: BK Human Polyomavirus (MM Strain) Quantitated Viral DNA PCR control.

Unit Size: 250 µL

Expiration Date: 08.2022

Suspending Buffer: 10 mM Tris, 1 mM EDTA, pH 8.0 with 50 µg/ml glycogen carrier

QUALITY CONTROL DATA

DNA Copy Number by Digital

PCR: 1.4×10^5 copies/µL

Note: The BK viral genome is linearized at the BamH I site (base 4856). Due to the linear nature of this DNA, primer sets that span the BamH I digestion site will not produce an amplification product.

PCR Analysis of DNA Control:

PCR analysis was performed on purified BK Polyomavirus using primers specific for the large T antigen gene of BK Polyomavirus. The reaction produced a 474 bp fragment. The expected band was observed from 10^5 copies/reaction down to 10^3 copies/reaction.

DNA Quantitation:

DNA copy number was determined by digital PCR. DNA copy number may vary depending on the quantitation method and primers used.

Digital Analysis:

Primer Sequence:

Digital PCR was performed using the following viral DNA primers specific for VP1 Region of BKV Polyomavirus.¹

Forward: 5' TGA TAG CCC AGA GAG AAA AAT GC 3'

Reverse: 5' TCC ACA GGT TAG GTC CTC ATT TAA A 3'

Probe: 5' [FAM] TTA CAG CAC AGC AAG AAT TCC CCT CCC [BHQ-1] 3'

Where FAM is a 6-fluorescein derivative and BHQ1 is a dark quencher (Black Hole Quencher 1).

PRODUCT DETAILS

Shipping and Storage:

This product is shipped frozen on dry ice. **Store at -20°C upon receipt.** Avoid multiple freeze-thaw cycles as product degradation may result.

Recommendations:

Upon thawing, centrifuge the vial for a few seconds to remove residual droplets from the lid. **CAUTION:** Advanced Biotechnologies does not recommend storage of dilutions of quantitated PCR controls under any conditions. All dilutions should be made immediately before use and used promptly. We have observed that dilutions used for standard curves may tend to "lose" copy number with time (sometimes a matter of an hour or so after dilution) especially at dilutions less than 100-1000 copies per microliter.

Applications For Use:

Advanced Biotechnologies quantitated PCR controls are prepared from virus, bacteria, parasites, or mollicutes, and are intended for use as positive PCR quantitation standards for the organism in question. Due to the nature of these products, we cannot guarantee their suitability as extraction controls. Additionally, due to the extreme sensitivity of detection in PCR reaction, and since no method of purification can guarantee the complete absence of extraneous agents, PCR controls are not intended for use as negative controls for other organisms.

Safe Handling Recommendation

The DNA extraction procedure used has been shown to eliminate the infectivity of most viruses and bacteria; therefore, this product is not considered biohazardous. However, this product is not specifically tested and should be handled in accordance with Good Laboratory Practices and any applicable local guidelines.

References:

1. Hoffman N, Cook L, Atienza E, Limaye A, Jerome K. Marked Variability Of BK Virus Load Measurement Using Quantitative Real-Time PCR Among Commonly Used Assays. *Journal of Clinical Microbiology* 46 (8): 2671-2680 (2008) doi:10.1128/JCM.00258-08

This product is for research use only.
Not for use in diagnostic procedures.


Quality Control

02/02/2021
Date



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CERTIFICATE OF ANALYSIS