

pCR®II-TOPO® Containing Hemagglutinin (HA) Gene from Monkeypox Virus, Zaire 79, Linearized

Catalog No. NR-4076

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Product Description: The hemagglutinin (HA) gene from monkeypox virus, Zaire 79 (BEI Resources NR-2324) was amplified from extracted DNA and cloned into the phagemid vector, pCR®II-TOPO®. The plasmid was produced in *Escherichia coli* DH5α™-T1^R cells, extracted using a QIAGEN Plasmid Maxi Kit and linearized with *Hind*III. The sequence of the HA gene of NR-4076 differs from the monkeypox virus, Zaire 79 HA sequence (GenBank: DQ011155) by one nucleotide at position 516 (T to C).

Lot¹: 7662479

Manufacturing Date: 25AUG2006

TEST	SPECIFICATIONS	RESULTS
Agarose Gel Electrophoresis of Linearized Plasmid DNA ²	Migrates as a single band at ~ 5,100 bp	Migrates as a single band at ~ 5,100 bp
Sequencing of HA Gene (942 bp)	Report results	One nucleotide difference from GenBank DQ011155 at position 516 of the HA gene (T to C)
DNA Content by PicoGreen® Measurement	Report results	1.37 µg per mL (0.14 µg/mL)
Concentration of DNA Molecules	Calculated using PicoGreen® concentration and molecular weight of plasmid	2.45 X 10 ¹¹ molecules per mL (1.225 X 10 ⁹ molecules per 5 µL)

¹DNA from monkeypox virus, Zaire 79 (BEI Resources NR-2324, lot 4729797) was extracted using a QIAamp Viral RNA Minikit (QIAGEN 52904). The amplified HA gene was cloned into the pCR®II-TOPO® plasmid vector using TOPO TA Cloning® Kit Dual Promoter (Invitrogen™ K4620). Plasmid DNA was extracted using a Plasmid Maxi Kit (QIAGEN 12162).

²Purified plasmid was linearized with *Hind*III (New England BioLabs, Inc. R0105S).

Date: 27 FEB 2008

Signature: Signature on File

Title: Technical Manager, BEI Authentication or designee

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