

**Genomic RNA from Zika Virus, DAK AR 41524**

**Catalog No. NR-51473**

**Product Description:** Genomic RNA was isolated from a preparation of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells<sup>1</sup> infected with Zika virus (ZIKV), DAK AR 41524.

**Lot<sup>2</sup>: 70021061**

**Manufacturing Date: 18DEC2018**

TEST	SPECIFICATIONS	RESULTS
<b>Genotypic Analysis</b> Sequencing of species-specific region (930 nucleotides)	≥ 98% identity with ZIKV, DAK AR 41524 (GenBank: KX601166.2) Consistent with source organism (BEI Resources NR-50338)	99.9% identity with ZIKV, DAK AR 41524 (GenBank: KX601166.2) Consistent with NR-50338
<b>Functional Activity by RT-PCR Amplification<sup>3</sup></b> NS3-NS4 polyprotein gene	~ 1080 base pair amplicon	~ 1080 base pair amplicon (Figure 1)
<b>Pre-Vial Concentration by RiboGreen<sup>®</sup> Measurement (Viral, Cellular and Carrier)<sup>4</sup></b>	Report results	24.8 ng per 100 µL (0.248 µg/mL)
<b>Estimated Amount per Vial<sup>4</sup></b>	Report results	24.8 ng
<b>Genome Copy Number by ddPCR (Post-Vial)<sup>5</sup></b>	Report results	2.4 × 10 <sup>3</sup> genome copies/mL
<b>Virus Inactivation</b> 10% of total yield inoculated on Vero cells <sup>1</sup> and evaluated for cytopathic effect <sup>6</sup>	No viable virus detected	No viable virus detected

<sup>1</sup>Vero cells: ATCC<sup>®</sup> CCL-81<sup>™</sup>

<sup>2</sup>Nucleic acid was extracted from a preparation of ZIKV, DAK AR 41524 (BEI Resources NR-50338 lot 64237873), using a QIAamp<sup>®</sup> Viral RNA Mini Kit (Qiagen 52906).

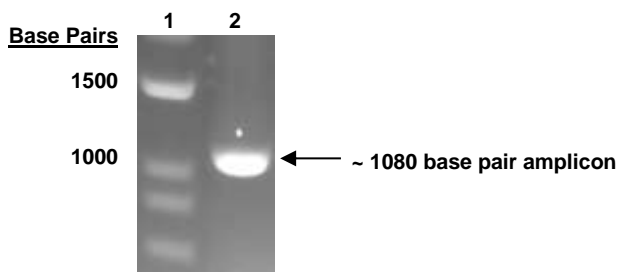
<sup>3</sup>Reverse transcription was performed using an iScript<sup>™</sup> cDNA Synthesis Kit (Bio-Rad 170-8891) with 10 µL of NR-51473 in a 20 µL reaction; PCR was performed using iTaq<sup>™</sup> DNA Polymerase (Bio-Rad 170-8870) with 5 µL of cDNA in a 50 µL reaction.

<sup>4</sup>Measurement is determined pre-vial, prior to dilution, due to the limit of detection of the quantification method.

<sup>5</sup>ddPCR data was obtained post-vial from 9 replicates on the BioRad QX200 Droplet Digital PCR (ddPCR<sup>™</sup>) System.

<sup>6</sup>Use of the QIAamp<sup>®</sup> Viral RNA Mini Kit has been demonstrated to consistently inactivate 100% of ZIKV as shown by the absence of cytopathic effect (CPE) after plating the entire extract on virus-susceptible cells.

**Figure 1: Functional Activity of NR-51473 by RT-PCR Amplification of NS3-NS4 polyprotein gene**



Lane 1: Invitrogen<sup>™</sup> TrackIt<sup>™</sup> 1 Kb Plus DNA Ladder

Lane 2: PCR product from 0.5 µL of NR-51473

/Heather Couch/

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Program Manager or designee, ATCC Federal Solutions

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