

Genomic RNA from West Nile Virus, R94224

Catalog No. NR-59879

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Product Description:

Genomic RNA was isolated from a preparation of cell lysate and supernatant from *Chlorocebus aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) infected with West Nile virus (WNV), R94224. (BEI Resources NR-59933 lot 70071795) using QIAamp® Viral RNA Mini Kit (Qiagen® 52906). The viral genomic RNA is in a background of cellular nucleic acid and carrier RNA.

Lot: 70070075

Manufacturing Date: 17SEP2024

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of a species-specific region (~ 870 nucleotides)	≥ 98% identity with WNV from USA (GenBank: AY646354)	99.5% identity with WNV from USA (GenBank: AY646354) ¹
Functional Activity by RT-PCR Amplification² Polyprotein gene	~ 950 base pair amplicon	~ 950 base pair amplicon (Figure 1)
Estimated Concentration (post-dilution) by Qubit® Measurement (Viral, Cellular and Carrier)³	Report results	6.3 ng per 100 µL (0.063 µg/mL)
Estimated Amount per Vial³	Report results	6.3 ng
Virus Inactivation 10% of total yield inoculated on Vero cells and evaluated for cytopathic effect after serial passage ⁴	No viable virus detected	No viable virus detected

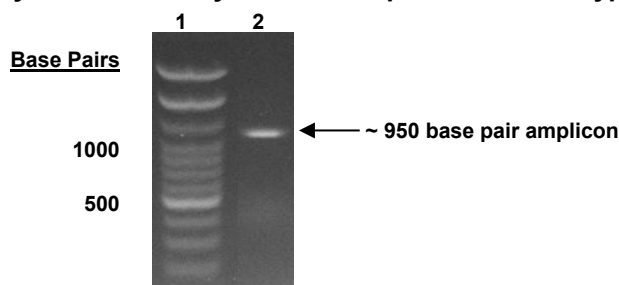
¹Sequence information for WNV, R94224 is not available in the NCBI database; the nucleotide sequence obtained for NR-59879 lot 70070075 is highly similar to numerous WNV strains.

²Amplified using iTaq™ Universal SYBR Green One-step Kit (Bio-Rad® 172-5151) with 5 µL of NR-59879 in a 50 µL reaction

³Measurement is determined pre-vial prior to dilution due to the limit of detection of the quantification method

⁴Use of the QIAamp® Viral RNA Mini Kit has been demonstrated to consistently inactivate 100% of WNV as shown by the absence of cytopathic effect (CPE) and viral RNA expression by RT-PCR after plating the entire extract on virus-susceptible cells for two passages.

Figure 1: Functional Activity of NR-59879 by RT-PCR Amplification of Polyprotein Gene



Lane 1: Invitrogen™ TrackIt™ 100 base pair DNA Ladder

Lane 2: PCR product from 1 µL of NR-59879

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Technical Manager or designee, ATCC Federal Solutions

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Certificate of Analysis for NR-59879

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