

Plasmid Containing West Nile Virus, MAD78 Infectious Clone, pWNV-MAD-IC

Catalog No. NR-49446

For research use only. Not for human use.

Contributor:

Brenda L. Fredericksen Ph.D., Department of Cell Biology and Molecular Genetics, and Maryland Pathogen Research Institute, University of Maryland, College Park, Maryland, USA

Manufacturer:

BEI Resources

Product Description:

The entire West Nile virus (WNV) MAD78 (DakAnMg798) genome was cloned into the pWSK29 vector as described to generate plasmid pWNV-MAD-IC.¹ The plasmid was grown in *Escherichia coli* MDS™ 42 cells (Scarab Genomics) and extracted using a QIAGEN® Plasmid Plus Maxi Kit.

pWNV-MAD-IC contains a T7 bacteriophage promoter immediately upstream of the 5' end of the viral genome. Transfection of Vero cells with RNA transcribed *in vitro* from the linearized plasmid is reported to result in the production of infectious WNV with biological properties indistinguishable from the parental WNV-MAD78.¹

NR-49446 has been qualified for use in bacterial transformations.

Material Provided:

Each vial contains approximately 100 uL of plasmid DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 7.0). The concentration, in µg per mL, is shown on the Certificate of Analysis for each lot.

Packaging/Storage:

NR-49446 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Functional Activity:

The generation of infectious WNV after mammalian cell transfection with RNA transcribed *in vitro* from NR-49446 has not been confirmed at BEI Resources. The presence of the authentic, full-length WNV MAD78 genome and the pWSK29 vector in NR-49446 has been confirmed by next generation sequencing on the Illumina MiSeq platform.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Plasmid Containing West Nile Virus, MAD78 Infectious Clone, pWNV-MAD-IC, NR-49446.”

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

- Hussman, K. L., et al. “*In vitro* and *in vivo* Characterization of a West Nile Virus MAD78 Infectious Clone.” Arch. Virol. 159 (2014): 3113–3118. PubMed: 25023336.

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