



Product Sheet

# Quantitative Synthetic West Nile Virus RNA (ATCC® VR-3198SD™)

Please read this FIRST

Storage Temp.  
8°C or colder

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Biosafety Level  
1

### Intended Use

This product is intended for research and diagnostic use only. It is not intended for any animal or human therapeutic use.

### Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: Quantitative Synthetic West Nile Virus RNA (ATCC® VR-3198SD™)

### Nucleic Acid Information

powder  
Specification range: >1.0 x 10<sup>8</sup> copies

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
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Or contact your local distributor

### Description

**Source:** Quantitative Synthetic West Nile Virus RNA

**Description:** The Synthetic West Nile Virus RNA contains single-stranded RNA genetic material designed and synthetically created for use as a genetic surrogate for West Nile Virus, known as molecular standards. Molecular standards are appropriate for use as control material in molecular applications, such as PCR.

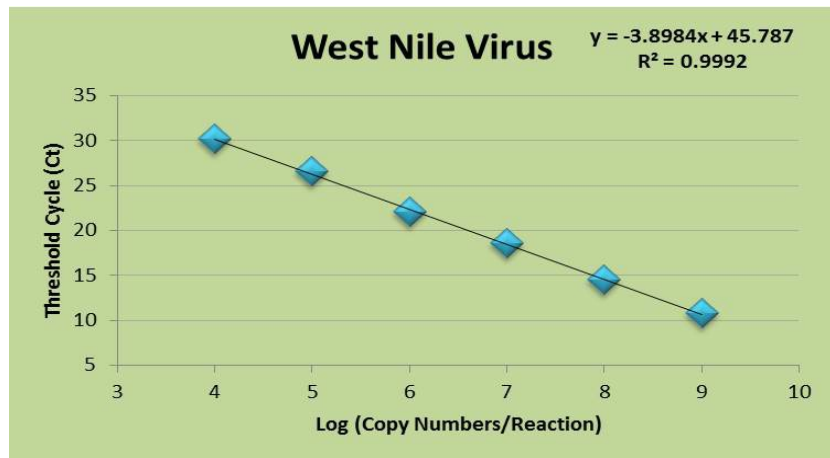
**Note:** RNA is easily degraded. Take extra precautions against contamination by using new gloves and clean lab coats when working with RNA. Use only RNase-free lab materials when handling this product. Vortexing can damage the Synthetic West Nile Virus RNA. Gentle pipetting is highly recommended. Aliquoting is highly recommended to avoid multiple freeze-thaws, which can damage the Synthetic West Nile Virus RNA.

### Batch-Specific Information

Refer to the Certificate of Analysis for batch-specific test results.

### Preparation Procedure

1. Centrifuge Synthetic West Nile Virus RNA before opening to avoid losing dried pellet.
2. Calculate the volume of molecular-grade water needed to obtain your desired stock concentration. We recommend resuspending Synthetic West Nile Virus RNA in 55 µL molecular-grade water to obtain an approximate stock concentration of 2x10<sup>6</sup> Copy Numbers (CN)/µL or 1x10<sup>7</sup> CN/reaction with a 5 µL reaction volume.
3. Incubate at 2-8°C for at least fifteen minutes to allow complete rehydration. Do not let sit overnight.
4. Mix by pipetting up and down gently several times.
5. Centrifuge briefly to ensure all liquid is in the bottom of the tube.
6. Aliquot the Synthetic West Nile Virus RNA into 10 µL stock vials and store at -80°C.
7. Thaw the stock vial aliquot at 2-8°C and dilute to your working concentration (Refer to the figure below for recommended concentration).
8. Add 2-5 µL of the *diluted* Synthetic West Nile Virus RNA to your reverse transcription PCR reaction and run according to your reverse transcription PCR protocol.



**NOTE:** The standard curve was performed using 5 µL of Synthetic West Nile Virus RNA per reaction. Adjust your dilutions accordingly if using a different volume. Recommended working concentration should be between 10<sup>6</sup> CN/reaction and 10<sup>7</sup> CN/reaction.

### Quality Control Information

**Genetic Target:** Fragments from the 5'UTR region, anchored capsid protein C gene, capsid protein C gene, membrane glycoprotein precursor prM gene, envelope protein E gene, nonstructural protein NS1, NS2A, NS3, and NS5 genes, and the 3' UTR region of the West Nile Virus genome

**Format Provided:** Dried RNA

**Starting Amount:** 1.1 x 10<sup>8</sup> Copy Numbers (CN)

**Downstream compatibility:** Reverse Transcription PCR or other molecular applications

### Biosafety Level: 1


Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in



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the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

### ATCC Warranty

ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this product. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

### Disclaimers

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Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at [www.atcc.org](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

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