

## **PEI Reference Preparation WNV Lineage 2 RNA (#13300/19)**

Each vial contains 0.5 mL of lyophilized heat-inactivated West Nile Virus (WNV) from lineage 2 (Héja), diluted in pooled human negative plasma. The reference preparation is intended to be used by nucleic acid amplification technique (NAT) assays for the detection of WNV RNA in human plasma samples.

### **RECONSTITUTION**

Before reconstitution the vial should be allowed to equilibrate to ambient temperature. Each vial should be reconstituted in **0.5 mL of sterile nuclease-free water** and left for a minimum of 10 minutes with occasional agitation before use.

The reference material was calibrated in the study to establish the 1<sup>st</sup> World Health Organization (WHO) International Standard (IS) for WNV RNA (1). The preparation has been assigned a WNV RNA concentration of **5.88 log<sub>10</sub> IU/mL** (International Units/mL).

### **STORAGE**

The material is supplied lyophilized and should be stored at or below -20°C. After reconstitution the material should be stored in aliquots at or below -70°C. Once, diluted or aliquoted, users should determine the stability of the material according to their own method of preparation, storage and use.

### **SAFETY INFORMATION**

This preparation contains heat inactivated West Nile Virus. As with all materials of biological origin, this preparation should be regarded as potentially hazardous to health. It should be used only by trained personal and discarded according to the national laboratory's safety procedures.

### **DETAILED INFORMATION**

The reference material for WNV RNA is intended to be used in the standardization of NAT-based assays for WNV. The reference material has been prepared using a WNV lineage 2 strain (Héja; goshawk). The WNV isolate was kindly provided by the Bernhard Nocht Institute for Tropical Medicine. The material has been evaluated in an international collaborative study to evaluate and establish the 1<sup>st</sup> WHO IS for WNV RNA, involving 13 laboratories performing

a wide range of WNV NAT assays. Further details of the collaborative study are available in the report (1). The accession number for the sequence of the WNV virus strain is MZ605382 (2).

1. Kempster SL, Minhas R, Hockley JG, Morris CL. 2020. A collaborative study to evaluate the proposed 1<sup>st</sup> WHO International Standard for West Nile Virus (WNV) RNA for Nucleic Acid Amplification Techniques (NAT). Report WHO/BS/2020.2397. World Health Organization, Geneva, Switzerland.
2. Roth H, Kreß J, Chudy M, Blümel J, Schmidt-Chanasit J, Cadar D, Niedrig M, Ferenczi E, Herrmann M, Baylis SA, Miskey C. 2021. Genome sequences of West Nile Virus reference materials. Microbiol Resour Announc 10e00740-21.

## **ORDERING AND SHIPMENT INFORMATION**

The PEI Reference Preparation WNV Lineage 2 RNA (#13300/19) can be ordered by **email** ([refmat@pei.de](mailto:refmat@pei.de)), using the PEI Order Form available from the PEI website:

[www.pei.de/pei-reference-material](http://www.pei.de/pei-reference-material)

There is a fee of 100 € per vial plus packing costs.

If you have any questions, please do not hesitate to contact us:

Email: [refmat@pei.de](mailto:refmat@pei.de)