**PEI Reference Preparation HIV-1 RNA (#3441/04)**

Each vial contains 0.5 ml of lyophilized human HIV-1 positive plasma from subtype B. The reference preparation is intended to be used by NAT assays for the detection of HIV-1 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 reconstituted preparation has been assigned a HIV-1 RNA concentration of **80,000 IU/ml** (International Units/ml)

**STORAGE**

The material is supplied lyophilized and should be stored at or below -20°C.

For the preparation of e.g. "Run Controls" dilute the reconstituted material in HIV-negative human plasma or pooled human plasma and store aliquots at or below -70°C.
**DETAILED INFORMATION**

The reference standard was prepared from human plasma of an HIV-1 subtype B positive isolate 92TH026 from Thailand (GenBank Accession no. U08802, *env* 1-1682, *-gag* 1-727). The material was diluted in HBV-, HCV-, HIV-1-, Parvovirus B19- and HAV-negative pooled human plasma and lyophilized in 0.5 ml aliquots.

The PEI Reference Preparation HIV-1 RNA (#3441/04) was calibrated against the WHO International Standard for HIV-1 RNA (97/656; Holmes et al. (2001) J Virol Methods 92:141-150) using four different quantitative NAT assays.

These calibrations resulted in an assigned HIV-1 RNA concentration of **80,000 IU / ml** for the PEI Reference Preparation.

The exact conversion factor IU to “copies” is NAT assay specific. On average 1 IU corresponds to 0.5 copies.

**SAFETY INFORMATION**

This preparation contains material of human origin, and contains potentially infectious HIV-1. 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.

**ORDERING AND SHIPMENT INFORMATION**

The PEI Reference Preparation HIV-1 RNA (#3441/04) can be ordered by email ([referenzmaterial@pei.de](mailto:referenzmaterial@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 20 € per vial, and 15 € for packaging (maximum of 20 vials per box).

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

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