



## NIH AIDS Reagent Program

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### DATA SHEET

**Reagent:** HIV-1 NL4-3 1166 Infectious Molecular Clone (p56252-1)

**Catalog Number:** 7407

**Lot Number:** 100109

**Release Category:** A

**Provided:** 5 µg of dried purified DNA stabilized in DNASTable *Plus*

**Cloning Vector:** pNLPFB  
Ampicillin resistant

**Cloning Site:** MscI/PfIMI cloning site  
The size of the insert is 871 bp.

**GenBank:** [AY351736](#)

**Host Strain:** Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger plasmids may benefit from growth at 30°C. This construct may also be grown in other competent cells.

**Description:** A full length replication competent, infectious HIV-1 chimeric molecular clone. This plasmid contains the entire HIV-1 NL4-3 genome where the wild-type RT has been replaced with a mutant RT from patient that contains multiple drug resistance mutations.

Part of panel of 12 prototypical infectious multidrug resistant HIV-1 reverse transcriptase (RT) nucleoside/nucleotide RT inhibitor (NRTI) clones. The panel includes clones with each of the published nucleoside analog RT mutations in the combinations that occur most frequently in HIV-infected individuals.

The insert was amplified by RT-PCR from viral RT RNA isolated from patient plasma.

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ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

**Special Characteristics:**

This construct is 14,825 bp including the insert.

The panel includes clones with each of the published nucleoside analog RT mutations in the combinations that occur most frequently in HIV-infected individuals. Nucleic acid sequence data of the RT as well as phenotype susceptibility results for each clone is available from the [Stanford HIV Drug Resistance Database](#).

[Table of Catalog Numbers for all members of the panel](#)

The panel can be used for the following purposes:

- 1) Screening and testing new compounds designed to be effective against the most commonly isolated multidrug resistant variants.
- 2) Biochemical and biophysical studies that require a representative set of drug-resistant variants.

[Plasmid map and sequence file lot 100109](#)

This reagent is currently being provided as dried purified DNA stabilized in DNASTable *Plus*. Please see the notice for additional information and the protocol for reconstitution of dried DNA reagents. [Dried DNA Notice](#)

**Recommended Storage:**

Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier bag.

**Contributor:**

Dr. Robert W. Shafer

**References:**

Johnston E., Dupnik K.M., Gonzales M.J., Winters M.A., Rhee S.Y., Imamichi T. and Shafer R.W. Panel of prototypical infectious molecular HIV-1 clones containing multiple nucleoside reverse transcriptase inhibitor resistance mutations. *AIDS* **19** (7):731-3, 2005. [Abstract](#)

**NOTE:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 NL4-3 1166 Infectious Molecular Clone (p56252-1) from Dr. Robert W. Shafer (cat# 7407)." Also include the reference cited above in any publications.

**Last Updated:**

August 02, 2018

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