



## NIH AIDS Reagent Program

20301 Century Boulevard  
Building 6, Suite 200  
Germantown, MD 20874  
USA

Phone: 240 686 4740  
Fax: 301 515 4015  
aidsreagent.org

### DATA SHEET

**Reagent:** HIV-1 NL4-3 Infectious Molecular Clone (pNL4-3)

**Catalog Number:** 114

**Lot Number:** 160159 **Note:** Lot 160159 was found to have lost integrity and has been replaced by the next manufactured lot (190489).

**Release Category:** C

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

**Cloning Vector:** pUC18  
Ampicillin resistant

**Cloning Site:** Blunt end cloned

**GenBank:** [AF324493](#)

**Host Strain:** Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger molecular clones 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 subtype B NL4-3 molecular clone. The virus produced by this molecular clone utilizes CXCR4 as a co-receptor.

**Special Characteristics:** This construct is 14,825 bp including the insert. The source of this chimeric molecular clone is the HIV-1 NY5 isolate (5´) and the HIV-1 LAV isolate (3´) cloned directly from genomic DNA. The 5´ fragment of proviral NY5 (5´ SmaI in flanking sequences to 3´ EcoRI) and the 3´ fragment of proviral LAV (5´ EcoRI to 3´ NruI in flanking sequences) were blunt-end cloned into pUC18 at the PvuII site after removal of polylinker sites.  
[Contributor provided plasmid map and sequence information](#)  
[Plasmid map and sequence file lot 160159](#)

---

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.

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. Malcolm Martin

**References:** Adachi, A., Gendelman, H. E., Koenig, S., Folks, T., Willey, R., Rabson, A., & Martin, M. A. (1986). Production of acquired immunodeficiency syndrome-associated retrovirus in human and nonhuman cells transfected with an infectious molecular clone. *J Virol*, 59(2), 284-291. [PUBMED](#)

**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 Infectious Molecular Clone (pNL4-3) from Dr. Malcolm Martin (Cat# 114)." Also include the reference cited above in any publications. **Scientists at for-profit institutions or who intend commercial use of this reagent must contact the NIH Office of Technology Transfer at NIAID, Email: [NIAIDAIDSReagent@niaid.nih.gov](mailto:NIAIDAIDSReagent@niaid.nih.gov), before the reagent can be released. Please specify the name and a description of the intended use of the reagent.**

**Last Updated:** September 06, 2023

---

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.