



NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-1 pNL4-3.HSA.R-E-

Catalog Number: 3417

Lot Number: 030508

Release Category: C

Provided: 1 ml ampicillin-resistant, transformed DH5a cells.

Cloning Vector: pUC-19.

Description: Two frameshifts (5' Env and Vpr aa 26) render this clone Env- and Vpr-. Competent for a single round of replication. Requires cotransfection with Env expression vector to produce infectious virus.

Special Characteristics: Murine heat stable antigen CD24 (HSA) gene was inserted into the pNL4-3 nef gene to produce this clone. Virus can be produced by transfecting 2×10^6 293 or 293T cells with 10 μ g NL4-3 DNA and 10 μ g env expression vector DNA. Transfections can be performed in a 10 cm² tissue culture dish using standard calcium phosphate protocols. Virus is typically harvested 48 hours post-transfection. Infections should be performed in a total volume of 0.5 ml. The amphotropic pseudotypes generally have much higher infectivity than those bearing HIV-1 env. Cultures infected with HSA viruses can be assayed by FACS analysis with a commercial CD24 antibody (Pharmingen) 2-5 days post-infection.

[Plasmid Map](#)

Recommended Storage: -70°C.

Contributor: Dr. Nathaniel Landau.

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.

References:

He J, Choe S, Walker R, Di Marzio P, Morgan DO, Landau NR. Human immunodeficiency virus type 1 viral protein R (Vpr) arrests cells in the G2 phase of the cell cycle by inhibiting p34cdc2 activity. *J Virol* **69**:6705-6711, 1995. Connor RI, Chen BK, Choe S, Landau NR. Vpr is required for efficient replication of human immunodeficiency virus type-1 in mononuclear phagocytes. *Virology* **206**:935-944, 1995.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 pNL4-3.HSA.R⁻.E⁻ from Dr. Nathaniel Landau." Also include the references cited above in any publications. Patent pending.

Requests from commercial organizations must be directed to the New York University Office of Industrial Liaison at the following email address: sadhana.chitale@nyumc.org.

Last Updated

June 21, 2018

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