



Product Information Sheet for HRP-20250

pNL-NLucΔEnv D64V (IN-) Vector

Catalog No. HRP-20250

For research use only. Not for use in humans.

Contributor:

Bryan R. Cullen, Professor, Department of Molecular Genetics and Microbiology, Duke University, Durham, North Carolina, USA

Manufacturer:

NIH HIV Reagent Program

Product Description:

HRP-20250 is an HIV-1 indicator viral expression vector, encoding HIV-1 nano luciferase reporter virus (NL-NLuc) lacking 943 bp segment of *env* (envelope) gene, which renders it replication incompetent, and an inactivating D64V mutation in the integrase (IN-).^{1,2} NL-NLuc was generated from the parental NL4-3 molecular clone by introducing NLuc at the N terminal of Nef (96 bp of the ORF deleted) and preventing its expression. The vector carries an ampicillin resistance marker for transformant selection.¹ The plasmid size is 14,520 base pairs. The plasmid sequence and map are provided on the NIH HIV Reagent Program webpage.

Material Provided:

Each vial contains plasmid DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8.0). The DNA concentration and volume provided are shown on the Certificate of Analysis. The vial should be centrifuged prior to opening. Note: The contents of the vial should be used to replicate the plasmid in *E. coli* prior to expression studies.

Packaging/Storage:

HRP-20250 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through the NIH HIV Reagent Program, NIAID, NIH: pNL-NLucΔEnv D64V (IN-) Vector, HRP-20250, contributed by Dr. Bryan R. Cullen.”

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the NIH HIV Reagent Program Material Transfer Agreement (MTA). The MTA is available on our Web site at www.hivreagentprogram.org.

While the NIH HIV Reagent Program uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use, and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure the authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers, and contributors to the NIH HIV Reagent Program are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, and non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before the first commercial sale.

References:

1. Irwan, I. D., H. P. Bogerd and B. R. Cullen. “Epigenetic Silencing by the SMC5/6 Complex Mediates HIV-1 Latency.” *Nat. Microbiol.* 12 (2022): 2101-2113. PubMed: 36376394.
2. Adachi, A., et al. “Production of Acquired Immunodeficiency Syndrome-Associated Retrovirus in Human and Nonhuman Cells Transfected with an Infectious Molecular Clone.” *J. Virol.* 59 (1986): 284-291. PubMed: 3016298.

ATCC® is a trademark of the American Type Culture Collection.



NIH HIV Reagent Program

www.hivreagentprogram.org

E-mail: contact@HIVReagentProgram.org

Tel: 888-487-0727 | Fax: 703-365-2898

Page 1 of 1

© 2023 American Type Culture Collection (ATCC)

All rights reserved.

HRP-20250_01DEC2023