



Product Information Sheet for HRP-20249

pNL-NLucΔEnv Vector

Catalog No. HRP-20249

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

NIH HIV Reagent Program

Product Description:

HRP-20249 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.^{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 approximately 15,018 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-20249 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 Vector, HRP-20249, 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.

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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.

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HRP-20249_01DEC2023

Page 1 of 1