



## NIH AIDS Reagent Program

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### DATA SHEET

**Reagent:** HIV-1 NL4-3 Integrase His Expression Vector (pINSD.His)

**Catalog Number:** 2957

**Lot Number:** 080030

**Release Category:** C

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

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

**Cloning Vector:** pET15B  
Ampicillin resistant

**Description:** Contains the NL4-3 (Catalog #114) integrase coding sequence from pINSD (Catalog #2820) cloned into pET15B.

**Special Characteristics:** The size of this construct is 6565 bp including the insert.  
HIV-1 integrase with an amino-terminal polyhistidine tag is expressed upon transformation of pINSD.His into *E. coli* BL21(DE3) and IPTG induction. The expressed integrase may be purified by Ni-affinity chromatography. The polyhistidine tag may be subsequently removed by cleavage with thrombin. The integrase is functional in *in vitro* integration assays. *E. coli* strain BL21(DE3) (Novagen; ph: 1-800-526-7319, Cat. #69367-1) must be used for integrase expression, but the plasmid may be unstable in this host. Backup stocks should be maintained in HB101.

NL4-3 Integrase Sequence ([pINSD-IN insert](#))  
[pET15B vector](#)  
[Plasmid map and sequence file lot 080030](#)

This reagent is currently being provided as dried purified DNA stabilized in DNASTable

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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.

*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 Craigie

**References:** Bushman FD, Engelman A, Palmer I, Wingfield P, Craigie R. Domains of the integrase protein of human immunodeficiency virus type 1 responsible for polynucleotidyl transfer and zinc binding. *Proc Natl Acad Sci USA* **90**:3428-3432.

Craigie R, Hickman AB, Engelman A. Integrase In: *HIV Volume 2: A Practical Approach*. J. Karn (Ed.), Oxford Univ Press, pp. 53-71, 1995.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH from Dr. Robert Craigie: HIV-1 NL4-3 Integrase His Expression Vector (pINSD.His)." Also include the references cited above in any publications.

**Last Updated:** August 10, 2018

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