



NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-1 Tat Optimized Expression Vector

Catalog Number: 827

Lot Number: 160157

Release Category: A

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

Cloning Site: HindIII/EcoRI cloning site
The size of the insert is 289 bp.

Cloning Vector: pUC18
Ampicillin resistant

Description: An expression vector which produces HIV-1 subtype B BH10 Tat protein which has been codon-optimized for yeast and *E. coli* expression.

Special Characteristics: This construct is 2917 bp including the insert.
The original source of this expression vector is HIV-1 BH10 provirus. However, the coding sequence of this plasmid has been modified to utilize codons favored by yeast and *E. coli*.
HIV-1 Tat was inserted between the HindIII and EcoRI sites of the pUC18 vector. HindIII, BspMI, and NcoI sites are located at the 5' region of the insert.
GenBank Accession Number: [X07861](#)
[Contributor provided plasmid map and sequence information](#)
[Plasmid map and sequence file lot 160157](#)
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](#)

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.

Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger plasmids may benefit from growth at 30°C. This construct may also be grown in other competent cells.

Alternate names include: HIV-1 Tat Designer Gene™

Recommended Storage: Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier bag.

Contributor: NIAID, DAIDS

References: Adams, S. E., Johnson, I. D., Braddock, M., Kingsman, A. J., Kingsman, S. M., & Edwards, R. M. (1988). Synthesis of a gene for the HIV transactivator protein TAT by a novel single stranded approach involving in vivo gap repair. *Nucleic Acids Res*, 16(10), 4287-4298. [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 Tat Optimized Expression Vector from NIAID, DAIDS." Also include the references cited above in any publications.

Last Updated: July 18, 2017

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