



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	HIV-1 HXB2 $\Delta$ Rev Non-Infectious Molecular Clone (pMrev(-))
<b>Catalog Number:</b>	2086
<b>Lot Number:</b>	170062
<b>Release Category:</b>	C
<b>Provided:</b>	5 $\mu$ g of dried purified DNA stabilized in DNASTable <i>PLUS</i>
<b>Cloning Vector:</b>	pHXB2gpt Ampicillin resistant
<b>Cloning Site:</b>	Unknown
<b>Host Strain:</b>	Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger plasmids may benefit from growth at 30°C.
<b>Description:</b>	A full length non-infectious HIV-1 subtype B HXB2 $\Delta$ Rev molecular clone.
<b>Special Characteristics:</b>	<p>This construct is approximately 16,800 bp including the insert.</p> <p>The source of this molecular clone is pHXB2gpt, an infectious proviral clone of HIV-1 HXB2 virus (Cat #398). Site-directed mutagenesis was used to introduce a termination codon in place of the glycine residue 6 in the <i>rev</i>, and a leucine codon in place of arginine at residue 52 of <i>tat</i>. The resulting mutant is unable to synthesize Rev, but expresses functionally intact and active Tat.</p> <p>Cotransfection with a <i>rev</i> cDNA clone such as HIV-1 Rev Expression Vector (pCV1) (Cat# 303) only partially restores the normal transcription pattern and produces extremely low levels of virus. Cocultivation of the pMrev(-)/pCV1 cotransfectant with H9 cells results in the production of non-infectious viral particles. Increased levels of multiply spliced 1.8 kb viral mRNA species are expressed upon transfection into COS-1 cells.</p> <p>Co-transfection with Catalog #2085 will yield pseudovirus that utilizes CXCR4 as a co-receptor.</p>

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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.

A restriction digest with EcoRI produces fragments of approximately 10,000, 5,800, and 1,000 bp in length.

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](#)

Alternate names include: 107:trs(-)

**Recommended Storage:**

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

**Contributor:**

Dr. Reza Sadaie

**References:**

M. R. Sadaie, T. Benter and F. Wong-Staal. (1988). Site-directed mutagenesis of two trans-regulatory genes (tat-III, trs) of HIV-1. *Science*, 239(4842), 910-3. [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 HXB2 ΔRev Non-Infectious Molecular Clone (pMrev(-)) from Dr. Reza Sadaie." Also include the reference cited above in any publications.

**Scientists at for-profit institutions or who intend commercial use of this reagent must contact FDA Invention Licensing at the following email address: [FDAINventionLicensing@fda.hhs.gov](mailto:FDAINventionLicensing@fda.hhs.gov), before the reagent can be released.**

**Last Updated:**

March 24, 2020

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