



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	HIV-1 pKS242-M3 DNA
<b>Catalog Number:</b>	2810
<b>Lot Number:</b>	130315
<b>Release Category:</b>	D
<b>Provided:</b>	10 µg of dried purified DNA stabilized in DNastable <i>PLUS</i>
<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. This construct may also be grown in other competent cells.
<b>Description:</b>	<p>Proviral DNA from the parental clone pN1T-A was obtained from CEM cells after six months in culture, following cocultivation with PBLs from a lymphadenopathy patient. The DNA was used to generate pKS242 (Catalog #2809).</p> <p>To generate pKS242-M3, site-directed mutagenesis and isogenic exchange were performed on a 1.1 kb <i>EcoRI</i> <i>vif</i> gene encompassing fragment from pKS242 to convert Cys 114 to Leu. This clone lacks the <i>vpu</i> initiation codon, and Vpr is truncated at 78 amino acids. Contains an ampicillin resistance gene.</p>
<b>Special Characteristics:</b>	<p>pKS242-M3 produces a full length, replication competent virus with a <i>vif</i>-negative phenotype. The virus replicates and is cytopathic in some T-cell derived cell lines which are permissive for replication of <i>vif</i>-negative HIV-1 (Sup-T1, C8166). It does not replicate well in MT-2, H9, HUT 78, and selected CEM clones, and is nonproductive in PBLs.</p> <p>Updated 05Mar14: Sequence analysis suggests that Vpr is not truncated and is 98 amino acids long. <a href="#">Sequence starting at the 5' LTR to approximately gp120</a></p> <p>This reagent is currently being provided as dried purified DNA stabilized in DNastable <i>PLUS</i>. Please see the notice for additional information and the protocol for reconstitution of dried DNA reagents. <a href="#">Dried DNA Notice</a></p>
<b>Recommended Storage:</b>	Keep the reagent at room temperature in a dry storage cabinet or in a moisture barrier bag.

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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.

**Contributor:** Dr. David J. Volsky

**References:** Sakai K, Dewhurst S, Ma X, Volsky DJ. Differences in cytopathogenicity and host cell range among infectious molecular clones of human immunodeficiency virus type 1 simultaneously isolated from an individual. *J Virol* **62**:4078-4085, 1988. Sakai K, Ma X, Gordienko I, Volsky DJ. Recombinational analysis of a natural noncytopathic human immunodeficiency virus type 1 (HIV-1) isolate: role of the *vif* gene in HIV-1 infection kinetics and cytopathicity. *J Virol* **65**:5765-5773, 1991. Ma X, Sova P, Volsky DJ. Cysteine residues in the Vif protein of human immunodeficiency virus type 1 are essential for viral infectivity. *J Virol* **68**:1714-1720, 1994.

**NOTE:** Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH from Dr. David Volsky: HIV-1 pKS242-M3 DNA." Also include the references cited above in any publications.

**Last Updated:** June 21, 2018

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