



## NIH AIDS Reagent Program

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### DATA SHEET

**Reagent:** HIV-1 pKS242-M3 DNA

**Catalog Number:** 2810

**Lot Number:** 2/15/95

**Release Category:** D

**Provided:** 5 µg DNA in water (1 mg/ml). Propagate in DH5a, HB101, or JM109.

**Description:** 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).  
  
To generate pKS242-M3, site-directed mutagenesis and isogenic exchange were performed on a 1.1 kb *EcoRI* *vif* gene encompassing fragment from pKS242 to convert Cys 114 to Leu. This clone lacks the *vpu* initiation codon, and Vpr is truncated at 78 amino acids. Contains an ampicillin resistance gene.  
  
Updated 05Mar14: Sequence analysis suggests that Vpr is not truncated and is 98 amino acids long. [Sequence starting at the 5' LTR to approximately gp120](#)

**Special Characteristics:** pKS242-M3 produces a full length, replication competent virus with a *vif*-negative phenotype. The virus replicates and is cytopathic in some T-cell derived cell lines which are permissive for replication of *vif*-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.

**Recommended Storage:** -20°C.

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

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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.

**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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