



## NIH AIDS Reagent Program

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### DATA SHEET

**Reagent:** HIV-1 SC05 Env Expression Vector (pSC05.8C11.2344)

**Catalog Number:** 11576

**Lot Number:** 080071

**Release Category:** C

**Provided:** 20 µg of dried purified DNA stabilized in DNASTable *PLUS*

**Cloning Vector:** pcDNA3.1D Directional Topo Vector  
Ampicillin and neomycin resistant

**Cloning Site:** The HIV-1 rev/env cassette was ligated into the pcDNA3.1D Directional Topo vector (Invitrogen Life Technologies).

**GenBank:** [EU289200](#)

**Host Strain:** 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.

**Description:** Env clones of transmitted and early founder HIV-1 subtype B in primary HIV-1 infection (RNA positive, Western blot negative). HIV-1 clade B molecular rev/env clones derived from patient plasma during acute HIV-1 infection. The rev/env genes were PCR amplified by single genome amplification (SGA) followed by directional cloning into pcDNA3.1D. Clone sequences were confirmed to match the consensus sequence of all SGA-derived amplicons and represent the transmitted or early "founder" viral sequence. The rev/env clones were transfected with delta env HIV-1 SG3 in 293-T cells and the pseudotyped virions were found to mediate entry into TZM-bl cells utilizing CD4 and CCR5. The antibiotic resistance is ampicillin and the sequence information is available in GenBank (see Table for relevant accession numbers).

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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.

**Special Characteristics:**

This construct is 8449 bp including the insert.

[Plasmid map and sequence file lot 080071](#)

Applications: Phenotypic, neutralization susceptibility and structure-function analyses of the transmitted env.

[Table 1. HIV-1 Subtype B Panel of SGA Env clones](#)

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](#)

**Recommended Storage:**

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

**Contributor:**

Drs. Beatrice H. Hahn, Brandon F. Keele, George M. Shaw

**References:**

B. F. Keele, E. E. Giorgi, J. F. Salazar-Gonzalez, J. M. Decker, K. T. Pham, M. G. Salazar, C. Sun, T. Grayson, S. Wang, H. Li, X. Wei, C. Jiang, J. L. Kirchherr, F. Gao, J. A. Anderson, L. H. Ping, R. Swanstrom, G. D. Tomaras, W. A. Blattner, P. A. Goepfert, J. M. Kilby, M. S. Saag, E. L. Delwart, M. P. Busch, M. S. Cohen, D. C. Montefiori, B. F. Haynes, B. Gaschen, G. S. Athreya, H. Y. Lee, N. Wood, C. Seoighe, A. S. Perelson, T. Bhattacharya, B. T. Korber, B. H. Hahn and G. M. Shaw. (2008). Identification and characterization of transmitted and early founder virus envelopes in primary HIV-1 infection. *Proc Natl Acad Sci U S A*, 105(21), 7552-7. doi:10.1073/pnas.0802203105 [PUBMED](#)

**NOTE:**

**This clone is also available as a member of a panel set. See catalog #11663.**

**Scientists at for-profit institutions or who intend commercial use of Release Category C Reagents, must contact Hayes A. Lowe, J.D., UAB Research Foundation, The Office of Intellectual Property Management, AB 1120G, 1530 3rd Ave. S, Birmingham, AL 35294-0111, Tel: 205-972-0843 Fax: 205-934-5427, Email: [halowe@uab.edu](mailto:halowe@uab.edu), before the reagent(s) can be released.**

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH from Drs. Beatrice H. Hahn, Brandon F. Keele and George M. Shaw: HIV-1 SC05 Env Expression Vector (pSC05.8C11.2344)." Also include the references cited above in any publications.

**Last Updated:**

August 15, 2018

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