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DATA SHEET

Reagent:	Panel of HIV-1 Subtype B Env Clones
Catalog Number:	11227
Lot Number:	098293
Release Category:	C
Provided:	1 vial each, containing 20 µg (0.5 mg/ml) of plasmid DNA in TE buffer, except for cat #11034 with a concentration of 0.47 mg/ml, and #11037 and #11051 at 1 mg/ml. Clones 11017, 11018, 11022, 11023 and 11024 have ampicillin and neomycin marker while the rest have only ampicillin marker.
Cloning Site:	The HIV-1 env/rev cassette was either directly cloned (cat #11017, 11018, 11022, 11023 and 11024) or TA cloned (cat #11033-11038, and 11058) into the cloning site of the expression vector in the correct orientation with the CMV promoter. For expansion of plasmids refer to individual data sheets. Cat #11051 was derived by Spel partial digestion from pSG3.1 (cat #2003), klenow filling of the 3' recessed ends and religation.
Description:	This reference panel was designed for use as Env-pseudotyped viruses to facilitate standardized Tier 2/3 assessments (Mascola JR. et al. *J Virology* **79**(16):10103, 2005) of neutralizing antibody responses. When co-transfected with an env-deleted backbone plasmid (e.g. pSG3$^{\Delta env}$, cat #11051, included in the Panel) in 293T cells, these plasmids produce Env-pseudotyped viruses that are capable of a single round of infection in TZM-bl cells (cat #8129). The TZM-bl cell line is not part of this panel, therefore it should be separately ordered. The pseudoviruses exhibit a neutralization phenotype that is typical of most primary HIV-1 isolates. Notably, no clone is unusually sensitive or resistant to neutralization. The gp160 genes were cloned from sexually acquired, acute/early infections and comprise a wide spectrum of genetic, antigenic and geographic diversity within subtype B (Li M, et al. *J Virology* **79** (16):10108, 2005). These clones use CCR5 as co-receptor. Plasmid sequence information is available upon request.
Recommended Storage:	-80°C.

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: See table.

References:

Li, M., Gao F., Mascola J.R., Stamatatos L., Polonis V.R., Koutsoukos M., Voss G., Goepfert P., Gilbert P., Greene K.M., Bilska M., Kothe D.L., Salazar-Gonzalez J.F., Wei X., Decker J.M., Hahn B.H., and Montefiori D.C. Human immunodeficiency virus type 1 env clones from acute and early subtype B infections for standardized assessments of vaccine-elicited neutralizing antibodies. *J. Virology* **79**(16): 10108-10125, 2005.

Wei S, Decker JM, Liu H, Zhang Z, Arani RB, Kilby JM, Saag MS, Wu X, Shaw GM and Kappes JC. Emergence of resistant human immunodeficiency virus type 1 in patients receiving fusion inhibitor (T-20) monotherapy. *Antimicrob Agents Chemother* **46**: 1896-1905, 2002.

Wei X, Decker JM, Wang S, Hui H, Kappes JC, Wu X, Salazar-Gonzalez JF, Salazar MG, Kilby JM, Saag MS, Komarova NL, Nowak MA, Hahn BH, Kwong PD and Shaw GM. Antibody neutralization and escape by HIV-1. *Nature* **422**: 307-312, 2003.

NOTE:

These clones are available as a panel but they can also be ordered individually by catalog number.

Click here to see the table of individual reagents for this reference panel.

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH from (contributors): (name of clone)." Also include the reference cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent 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: 205-975-0843 Fax: 205-934-5427, email: halowe@uab.edu, before the reagent can be released.

Research Chart:

Plasmid Expansion Procedure

Plasmids cat #11017, 11018, 11022-11024, and 11051 plasmids were expanded using DH5α™ Competent Cells in LB medium at 34°C.

Plasmid cat #11034 was expanded using MAX Efficiency STBL2™ Competent Cells in LB medium at 30°C.

Plasmids cat #11033, 11035, 11036 and 11038 can be expanded using MAX Efficiency STBL2™ Competent Cells or DH5α™ Competent Cells in LB medium at 34°C.

Plasmid cat #11037 was expanded using MAX Efficiency STBL2™ Competent Cells (Invitrogen) in Terrific Broth (TB) medium at 30°C.
Plasmid cat #11058 was expanded using TOP 10 Competent Cells in LB medium at 30°C.

Last Updated: March 31, 2015

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