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DATA SHEET

Reagent:	HIV-1 gp160 Optimized Expression Vector (VC10014_101603_H7)
Catalog Number:	13298
Lot Number:	170310
Release Category:	E
Provided:	5 µg of dried purified DNA stabilized in DNAstable *Plus*
Cloning Site:	MluI/NheI cloning site The size of the insert is 2466 bp.
Cloning Vector:	pEMC* Ampicillin resistant
Description:	An expression vector which produces HIV-1 VC10014 subtype B gp160 protein
Special Characteristics:	This construct is 6442 bp including the insert. This plasmid expresses gp160 that was cloned from the quasispecies of an ART-naïve HIV-1 infected individual from the Vanderbilt/CFAR cohort (VC10014).This individual developed moderate neutralization breadth within 3 years of infection. The *env* gene was optimized for motifs that are associated with neutralization and breadth by using the Robins-Krasnitz algorithm. The portion of the reagent name in parentheses represents the subject identifier, the date of the plasma sample from which Env was cloned, and a unique identifier of the plasmid. Plasmid map and sequence file lot 170310 Genbank Accession Number: KJ698252.1 Plasmids can be propagated in STBL2 cells and grown at 37°C. Larger plasmids may benefit from growth at 30°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.

As identified in the 2014 Malherbe reference paper below, quasispecies variants (including this clone) that emerged over time with accumulated mutations in *env* were involved in the development of broadly neutralizing antibodies. Additional information about this expression vector and related expression vectors from the reference paper listed below can be found here: Additional information regarding Haigwood expression vectors

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: Dr. Nancy L. Haigwood

References:

D. C. Malherbe, F. Pissani, D. N. Sather, B. Guo, S. Pandey, W. F. Sutton, A. B. Stuart, H. Robins, B. Park, S. J. Krebs, J. T. Schuman, S. Kalams, A. J. Hessell and N. L. Haigwood. (2014). Envelope variants circulating as initial neutralization breadth developed in two HIV-infected subjects stimulate multiclade neutralizing antibodies in rabbits. J Virol, 88(22), 12949-67. doi:10.1128/JVI.01812-14 PUBMED

D. N. Sather, S. Carbonetti, D. C. Malherbe, F. Pissani, A. B. Stuart, A. J. Hessell, M. D. Gray, I. Mikell, S. A. Kalams, N. L. Haigwood and L. Stamatatos. (2014). Emergence of broadly neutralizing antibodies and viral coevolution in two subjects during the early stages of infection with human immunodeficiency virus type 1. J Virol, 88(22), 12968-81. doi:10.1128/JVI.01816-14 PUBMED

NOTE: Acknowledgement for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 gp160 Optimized Expression Vector (VC10014_101603_H7) from Dr. Nancy L. Haigwood (cat# 13298)." Also include the references cited above in any publications.

Recipient must not use or incorporate the reagent for commercial purposes.

Last Updated: November 07, 2018

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