



NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-1 96ZM651.8 gp120 Optimized Expression Vector

Catalog Number: 8661

Lot Number: 032612

Release Category: C

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

Cloning Site: EcoRI/BamHI cloning site
The size of the insert is 1,710 bp

Cloning Vector: pcDNA3.1
Ampicillin and neomycin resistant

Description: This expression vector produces gp120 Env protein which is a codon-optimized form of the 96ZM651.8 clone (Cat# 6173).

Special Characteristics: This construct is 7,117 bp including the insert.
Derived from the 96ZM651.8 clone (Cat# 6173). For this construct, the env gene was artificially reconstructed by substituting original viral codons with those of highly expressed human genes (Hass J, et al. *Curr Biol* **6**:315-324, 1996). The original signal peptide (aa 1-29) was replaced with the signal peptide from the human CD5 protein (MPMGS LQPLATLYLLGMLVASVLA). The env protein was truncated by introducing a stop codon right after the gp120/gp41 cleavage site (RVVEREKR). Besides these modifications, the env amino acid sequence is unchanged.
The size of the translated env protein is 511 aa.
Valuable for studies of protein expression and function, the generation of subtype specific immunological reagents, and the production of DNA based subunit vaccines directed against a broader spectrum of viruses.
GenBank accession number: [AY181197](#)

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.

[Table of codon-optimized 96ZM651.8 genes](#)

[Plasmid map and sequence file lot 032612](#)

Alternate names include: p96ZM651gp120-CD5-opt

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. Yingying Li, Feng Gao, and Beatrice H. Hahn.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 96ZM651.8 gp120 Optimized Expression Vector from Drs. Yingying Li, Feng Gao, and Beatrice H. Hahn (cat# 8661)."

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.

Last Updated:

December 06, 2018

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