



NIH AIDS Reagent Program

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DATA SHEET

Reagent: VRC-PG04 Heavy Chain Expression Vector

Catalog Number: 13559

Lot Number: 190366

Release Category: C

Provided: 5 µg of dried purified DNA stabilized in DNASTable *Plus*

Cloning Site: AgeI/SalI
The size of the insert is 392 bp.

Cloning Vector: CMV/R
Kanamycin resistant

Description: A VRC-PG04 mAb heavy chain expression vector which can be used with the corresponding VRC-PG04 mAb light chain expression vector (cat# 13560) to produce the monoclonal antibody, VRC-PG04.

Special Characteristics: This construct is 5,838 bp including the insert.
This is a IgG1 heavy chain expression vector for the broadly neutralizing antibody, VRC-PG04, which targets the CD4-binding site of HIV-1 gp120.
This plasmid can be used in conjunction with the complimentary VRC-PG04 light chain expression vector (cat# 13560) to produce the monoclonal antibody, VRC-PG04.
GenBank Accession Number: [JN159464](#)
[Contributor provided sequence file](#)
[Sequence file lot 190366](#)
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.

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.

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. Xueling Wu, John Mascola, Peter Kwong, and Denise Burton

References: Falkowska, E., Ramos, A., Feng, Y., Zhou, T., Moquin, S., Walker, L. M., Wu, X., Seaman, M. S., Wrin, T., Kwong, P. D., Wyatt, R. T., Mascola, J. R., Poignard, P. and Burton, D. R. (2012). PGV04, an HIV-1 gp120 CD4 binding site antibody, is broad and potent in neutralization but does not induce conformational changes characteristic of CD4. *J Virol*, 86(8), 4394-403. doi:10.1128/JVI.06973-11 [PUBMED](#)

Wu, X., Zhou, T., Zhu, J., Zhang, B., Georgiev, I., Wang, C., Chen, X., Longo, N. S., Louder, M., McKee, K., O'Dell, S., Perfetto, S., Schmidt, S. D., Shi, W., Wu, L., Yang, Y., Yang, Z. Y., Yang, Z., Zhang, Z., Bonsignori, M., Crump, J. A., Kapiga, S. H., Sam, N. E., Haynes, B. F., Simek, M., Burton, D. R., Koff, W. C., Doria-Rose, N. A., Connors, M., Mullikin, J. C., Nabel, G. J., Roederer, M., Shapiro, L., Kwong, P. D. and Mascola, J. R. (2011). Focused evolution of HIV-1 neutralizing antibodies revealed by structures and deep sequencing. *Science*, 333(6049), 1593-602. doi:10.1126/science.1207532 [PUBMED](#)

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: VRC-PG04 Heavy Chain Expression Vector from Drs. Xueling Wu, John Mascola, Peter Kwong, and Denise Burton (cat# 13559)." Also include the references cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact the Rockefeller University - Office of Technology Transfer at the following email address: mta@rockefeller.edu, before the reagent can be released.

Last Updated: August 27, 2020

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