



NIH AIDS Reagent Program

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DATA SHEET

Reagent: Anti-HIV-1 gp120 Monoclonal (4G10)

Catalog Number: 2534

Lot Number: 140064

Release Category: D

Provided: 1 mL of culture supernatant

Description: A monoclonal antibody to HIV-1 gp120, specifically to the V3 loop (epitope: RIQRGPGRAFVTGK)

Host: Mouse

Titer: The user should determine the optimal concentration for any application.

Special Characteristics: This antibody was produced in cell culture. It originates from a hybridoma. The hybridoma was created by immunizing Balb/c mice with HIV-1 gp120 (aa 303-327) fused to HBcAg particles. The resulting splenocytes were fused to Ag8653 myeloma cells.

4G10 recognizes HIV-1 gp120 V3 loop peptide RIQRGPGRAFVTIGK (aa 308-322) in ELISA. The antibody inhibits syncytium formation, RT activity, and p24 production *in vitro* (100% over 20 days).

Please see the [LANL HIV Immunology Database](#) for more information.

Applications: ELISA, Western blot, IFA

Recommended Storage: Keep the reagent at 4°C for short term storage and -80°C for long term storage. Avoid freeze-thaw cycles as reagent degradation may result.

Contributor: Dr. Albrecht von Brunn (Courtesy of CFAR, NIBSC)

Isotype: IgG₁

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.

References:

von Brunn, A., Brand, M., Reichhuber, C., Morys-Wortmann, C., Deinhardt, F., & Schödel, F. (1993). Principal neutralizing domain of HIV-1 is highly immunogenic when expressed on the surface of hepatitis B core particles. *Vaccine*, 11(8), 817-824. [PUBMED](#)

von Brunn A., Reichhuber C., Brand M., Bechowsky B., Gürtler L., Eberle J., Kleinschmidt A., Erfle V., Schödel F. (1993). The principal neutralizing determinant (V3) of HIV-1 induces HIV-1-neutralizing antibodies upon expression on HBcAg particles. *Vaccines* 93, Cold Spring Harbor Press; Cold Spring Harbor, New York, 159-165. [ARTICLE](#)

NOTE:

Publications should acknowledge the contributor and the Centre for AIDS Reagents. Acknowledgments should read: "The Anti-HIV-1 gp120 Monoclonal (4G10), NIH-ARP# 2534 (CFAR# 3012) was obtained from the Centre for AIDS Reagents, NIBSC, UK, supported by EURIPRED (EC FP7 INFRASTRUCTURES-2012 - INFRA-2012-1.1.5.: Grant Number 31266). www.euripred.eu/ Also include the references cited above in any publications.

Last Updated

December 18, 2017

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