



NIH AIDS Reagent Program

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DATA SHEET

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| Reagent: | Anti-HIV-1 gp120 Monoclonal (4G10) |
| Catalog Number: | 2534 |
| Lot Number: | 160245 |
| Release Category: | D |
| Provided: | 1 mL of culture supernatant |
| Description: | A monoclonal antibody to HIV-1 gp120, specifically to the V3 loop (epitope: RIQRGPGRAFVTIGK) |
| Host: | Mouse |
| Titer: | The user should determine the optimal concentration for any application. |
| Special Characteristics: | <p>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 308-322) fused to HBcAG particles. The resulting splenocytes were fused to Ag8653 myeloma cells.</p> <p>4G10 recognizes HIV-1 gp120 V3 loop peptide RIQRGPGRAFVTIGK (aa 308-322) in ELISA. The antibody inhibits syncytium formation, RT activity, and p24 production <i>in vitro</i> (100% over 20 days).</p> <p>Please see the LANL HIV Immunology Database for more information.</p> <p>Applications: ELISA, Western blot, IFA</p> |
| 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: | IgG ₁ |

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.

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