

NIH AIDS Reagent Program

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DATA SHEET

Reagent: Anti-HIV-1 gp120 Monoclonal (2G12)

Catalog Number: 1476

Lot Number: 098204

Release Category: C

Provided: 100 μL at 2.5 mg/mL (250 μg), in 2 mM acetic acid, 10% maltose- sterile, no

preservatives.

Host Site: Human.

Special Characteristics:

Recombinant human monoclonal antibody produced in CHO cells. Neutralizes SHIV variants HXBc2, KU2, 89.6, 89.6P and KB9 in MT-2 cells and laboratory HIV-1 strains IIIB and RF (weakly neutralizes MN and SF2), and a broad variety of primary isolates. Epitope is conformational and carbohydrate-dependent. Specific activity (ELISA) is >95%. Purity is >99.9%.

NOTE: Endotoxin has been shown to induce chemokines and other soluble HIV and SIV inhibitory factors in primary cultures of PBMC, monocytes and macrophages (Verani et al., J Exp Med 185:805-816, 1997; J Immunol 168:6388-6396, 2002; Montefiori in preparation). Thus, caution is advised when using this reagent for in vitro studies involving primary cells.

Recommended Storage:

Keep 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. Hermann Katinger.

Isotype: $IgG_1 \kappa$

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.

REV: 05/04/2015 Page 1 of 2

References:

Buchacher A, Predl R, Strutzenberger K, Steinfellner W, Trkola A, Purtscher M, Gruber G, Tauer C, Steindl F, Jungbauer A, et al. Generation of human monoclonal antibodies against HIV-1 proteins; electrofusion and Epstein-Barr virus transformation for peripheral blood lymphocyte immortalization. *AIDS Res Hum Retroviruses* **10**:359-369, 1994.

Trkola A, Purtscher M, Muster T, Ballaun C, Buchacher A, Sullivan N, Srinivasan K, Sodroski J, Moore JP, Katinger H. Human monoclonal antibody 2G12 defines a distinctive neutralization epitope on the gp120 glycoprotein of human immunodeficiency virus type 1. *J Virol* **70**:1100-1108, 1996.

Mascola JR, Lewis MG, Stiegler G, Harris D, VanCott TC, Hayes D, Louder MK, Brown CR, Sapan CV, Frankel SS, Lu Y, Robb. Protection of macaques against pathogenic simian/human immunodeficiency virus 89.6PD by passive transfer. *J Virol* **73**(5):4009-18, 1999.

Etemad-Moghadam B, Sun Y, Nicholson EK, Karlsson GB, Schenten D, Sodroski J. Determinants of neutralization resistance in the envelope glycoproteins of a simian-human immunodeficiency virus passaged in vivo. *J Virol* **73**(10):8873-9, 1999.

Crawford JM, Earl PL, Moss B, Reimann KA, Wyand MS, Manson KH, Bilska M, Zhou JT, Pauza CD, Parren PW, Burton DR, Sodroski JG, Letvin NL, Montefiori DC. Characterization of primary isolate-like variants of simian-human immunodeficiency virus. *J Virol* **73**(12):10199-207, 1999.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Anti-HIV-1 gp120 Monoclonal (2G12)from Dr. Hermann Katinger." Also include the references cited above in any publications.

This antibody is strictly limited to one vial per laboratory every two years. Requests from commercial institutions should be directed to: Dr. Hermann Katinger, Institute of Applied Microbiology, University of Agriculture, Muthgasse 18B, A-1190 Vienna, Austria, TEL: 43-1-36006-6202, FAX: 43-1-36-97- 615.

Last Updated

May 04, 2015

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REV: 05/04/2015 Page 2 of 2