

NIH AIDS Reagent Program

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DATA SHEET

Reagent: Anti-HIV-1 gp41 Monoclonal (50-69)

Catalog Number: 531

Lot Number: 150031

Release Category: E

Provided: 100 μg of purified antibody at 2.56 mg/mL in PBS

Description: A monoclonal antibody to HIV-1 gp41

Host: Human

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

Special Characteristics:

This antibody was produced in cell culture and purified by Protein A/G chromatography. It originates from a hybridoma created by fusing EBV-immortalized B-cells from HIV-seropositive individuals and heteromyeloma SHM-D33 cells. Please see the <u>LANL HIV Molecular Database</u> for more information.

It reacts with a gp41 peptide spanning aa 579-613 in ELISA. The exact epitope has not been identified. This monoclonal reacts with a conformational determinant which is maintained by an intrachain disulfide bond.

This antibody does not inhibit HIV-1-associated cell fusion or mediate neutralization, but it does mediate ADCC. It has been shown to enhance HIV-1 infection.

Applications: ELISA, Western Blot, ADCC

Recommended Storage:

Keep the reagent at 4°C for short term storage and at -80°C for long term storage.

Avoid freeze-thaw cycles as reagent degradation may result.

Contributor: Dr. Susan Zolla-Pazner

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: 01/08/2019 Page 1 of 2

Isotype: $IgG_1 \kappa$

References:

Gorny, M. K., Gianakakos, V., Sharpe, S., & Zolla-Pazner, S. (1989). Generation of human monoclonal antibodies to human immunodeficiency virus. Proc Natl Acad Sci U S A, 86(5), 1624-1628. PUBMED

Pinter, A., Honnen, W. J., Tilley, S. A., Bona, C., Zaghouani, H., Gorny, M. K., & Zolla-Pazner, S. (1989). Oligomeric structure of gp41, the transmembrane protein of human immunodeficiency virus type 1. J Virol, 63(6), 2674-2679. PUBMED

Till, M. A., Ghetie, V., May, R. D., Auerbach, P. C., Zolla-Pazner, S., Gorny, M. K., . . . Vitetta, E. S. (1990). Immunoconjugates containing ricin A chain and either human anti-gp41 or CD4 kill H9 cells infected with different isolates of HIV, but do not inhibit normal T or B cell function. J Acquir Immune Defic Syndr, 3(6), 609-614. <u>PUBMED</u>

Tyler, D. S., Stanley, S. D., Zolla-Pazner, S., Gorny, M. K., Shadduck, P. P., Langlois, A. J., . . . Weinhold, K. J. (1990). Identification of sites within gp41 that serve as targets for antibody-dependent cellular cytotoxicity by using human monoclonal antibodies. J Immunol, 145(10), 3276-3282. <u>PUBMED</u>

Xu, J. Y., Gorny, M. K., Palker, T., Karwowska, S., & Zolla-Pazner, S. (1991). Epitope mapping of two immunodominant domains of gp41, the transmembrane protein of human immunodeficiency virus type 1, using ten human monoclonal antibodies. J Virol, 65(9), 4832-4838. PUBMED

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 gp41 Monoclonal (50-69) from Dr. Susan Zolla-Pazner." Also include the references cited above in any publications.

Patent pending. Corporate requests should be directed in writing to Dr. Susan Zolla-Pazner at the Icahn School of Medicine at Mount Sinai, One Gustave L. Levy Place, Box 1090, New York, NY 10029.

Also note that contributor will like to be informed at least two weeks before submitting a document for publication or making a public oral presentation of research results obtained from the use of this material in writing or by providing a copy of the publication document.

Recipient must not use or incorporate the reagent for commercial purposes.

Last Updated January 08, 2019

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REV: 01/08/2019 Page 2 of 2