



NIH AIDS Reagent Program

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DATA SHEET

Reagent: HIV-1 gp120 MAb (E51)

Catalog Number: 11439

Lot Number: 130015

Release Category: C

Provided: 100 µl per vial at 5 mg/ml (500 µg) Antibody purified from culture supernatant fluid by Protein A affinity chromatography. The storage buffer is phosphate-buffered saline (Ca⁺⁺, Mg⁺⁺ free, pH 7.2). No preservatives included.

Host Site: Human EBV-transformed B cell fused to HMA2.11TG/O heteromyeloma

Titer: Not determined

Special Characteristics: Derived by EBV transformation of B cells from PBMC's of an HIV-1 infected patient. This CD4i antibody binds to a highly conserved conformation-dependent epitope within the coreceptor binding site on gp120. A sulfated tyrosine in an unusually long CDR H3 contributes to antibody recognition of gp120. This antibody exhibits limited neutralizing activity against primary HIV-1 isolates.

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. James E. Robinson

Isotype: IgG1

References: Huang CC, Venturi M, Majeed S, Moore MJ, Phogat S, Zhang MY, Dimitrov DS, Hendrickson WA, Robinson J, Sodroski J, Wyatt R, Choe H, Farzan M, Kwong PD. Structural basis of tyrosine sulfation and VH-gene usage in antibodies that recognize the HIV type 1 coreceptor-binding site on gp120. Proc Natl Acad Sci U S A. 2004 Mar 2;101(9):2706-11. [\[Abstract\]](#) [\[Full Text\]](#)

Xiang SH, Wang L, Abreu M, Huang CC, Kwong PD, Rosenberg E, Robinson JE, Sodroski

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.

J. epitope mapping and characterization of a novel CD4-induced human monoclonal antibody capable of neutralizing primary HIV-1 strains. *Virology*. 2003 Oct **10**;315(1):124-34. [[Abstract](#)] [[Full Text](#)]

Choe H, Li W, Wright PL, Vasilieva N, Venturi M, Huang CC, Grundner C, Dorfman T, Zwick MB, Wang L, Rosenberg ES, Kwong PD, Burton DR, Robinson JE, Sodroski JG, Farzan M. Tyrosine sulfation of human antibodies contributes to recognition of the CCR5 binding region of HIV-1 gp120. *Cell*. 2003 Jul **25**; **114**(2):161-70. [[Abstract](#)] [[Full Text](#)]

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 gp120 Monoclonal Antibody (E51)(Cat#11439) from Dr. James E. Robinson." Also include the reference cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact Dr. James E. Robinson, Tulane University HSC at email address jrobinso@tulane.edu and specify in the email the name of the reagent and a description of the intended use of the reagent.

Last Updated

February 09, 2015

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