



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	Anti-Human CD3/4 Bi-specific Monoclonal
Catalog Number:	12278
Lot Number:	150084
Release Category:	A
Provided:	100 µg (100 µL at 1 mg/mL) of purified antibody in PBS.
Description:	This antibody binds to both human CD3 and human CD4.
Host:	Mouse
Special Characteristics:	<p>Bi-specific monoclonal antibodies are recombinant antibodies composed of fragments from two different monoclonal antibodies and therefore can bind to two different antigens. The bi-specific nature of these antibodies have been classically exploited to link cancer antigen bearing cells to cytotoxic cells such as those expressing CD3, for the rapid removal of those cancerous cells.</p> <p>The bi-specific CD3/4 (CD3.4) monoclonal antibody was generated by fusing the anti-CD3 mAb producing hybridoma (12F6) with the anti-CD4 mAb producing hybridoma (OKT4). The resulting anti-CD3/4 antibody, when added to long term peripheral blood co-cultures results in the potent elimination of CD4+ T cells. The remaining cells are highly activated and serve as a reliable source of purified activated cells of interest.</p> <p>Protocol for cell expansion</p>
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:	DAIDS (Drs. Johnson Wong and Galit Alter)

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:

1. Julg B, Williams KL, Reddy S, Bishop K, Qi Y, Carrington M, Goulder PJ, Ndung'u T, Walker BD. Enhanced anti-HIV functional activity associated with Gag-specific CD8 T-cell responses. *J Virol.* 2010 Jun;84(11):5540-9. Epub 2010 Mar 24.
2. Chen H, Piechocka-Trocha A, Miura T, Brockman MA, Julg BD, Baker BM, Rothchild AC, Block BL, Schneidewind A, Koibuchi T, Pereyra F, Allen TM, Walker BD. Differential neutralization of human immunodeficiency virus (HIV) replication in autologous CD4 T cells by HIV-specific cytotoxic T lymphocytes. *J Virol.* 2009 Apr;83(7):3138-49. Epub 2009 Jan 21.
3. Alter G, Martin MP, Teigen N, Carr WH, Suscovich TJ, Schneidewind A, Streeck H, Waring M, Meier A, Brander C, Lifson JD, Allen TM, Carrington M, Altfeld M. Differential natural killer cell-mediated inhibition of HIV-1 replication based on distinct KIR/HLA subtypes. *J Exp Med.* 2007 Nov 26;204(12):3027-36. Epub 2007 Nov 19.
4. Bihl FK, Loggi E, Chisholm JV 3rd, Hewitt HS, Henry LM, Linde C, Suscovich TJ, Wong JT, Frahm N, Andreone P, Brander C. Simultaneous assessment of cytotoxic T lymphocyte responses against multiple viral infections by combined usage of optimal epitope matrices, anti-CD3 mAb T-cell expansion and "RecycleSpot" *J Transl Med.* 2005 May 11;3(1):20.
5. Wong JT, Colvin RB. Bi-specific monoclonal antibodies: selective binding and complement fixation to cells that express two different surface antigens. *J Immunol.* 1987 Aug 15;139(4):1369-74.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Anti-Human CD3/4 Bi-specific Monoclonal from Drs. Johnson Wong and Galit Alter."

Last Updated

December 04, 2015

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