



NIH AIDS Reagent Program

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DATA SHEET

Reagent: Anti-Human CXCR4 Monoclonal (44716)

Catalog Number: 4085

Lot Number: AVB041111

Release Category: A

Provided: 100 µg purified protein from ascites, lyophilized in PBS.

Description:
This antibody was produced from a mouse hybridoma elicited from a Balb/c mouse inoculated with hCXCR-4 transfected mouse 3T3 cells. The IgG fraction of ascites fluid was purified by Protein G affinity chromatography.

This antibody has been selected for its ability to react by FACS analysis specifically with human and non-human cells expressing human CXCR-4 (fusin). It will also react with cells expressing feline CXCR-4 but not rat CXCR-4. This antibody does not cross-react with other chemokine receptors.

Host: Balb/c mouse splenocyte.

Special Characteristics: Specificity: rh CXCR-4 (fusin)
Applications: Neutralization of bioactivity, Flow Cytometry, Immunofluorescence, Immunohistochemistry.

- This antibody can be used at 10µl/mL (10µl/10⁵-10⁶ cells) for flow cytometry and immunofluorescence applications.
- This antibody can be used at 5µl/mL to stain stimulated PBMCs fixed with 2% formaldehyde and permeabilized with 0.1% saponin.
- This antibody can be used at 5-15µl/mL with the appropriate secondary reagents to detect human CXCR-4 cultured cells or tissue sections.
- The exact concentration of antibody required to neutralize the human cell surface CXCR-4 mediated bioactivity is dependent on the SDF-1/PBSF concentration, as well as on the number of CXCR-4 receptors present on the cell surface (a function of cell type and culture conditions). To provide a guideline, R&D Systems has determined the neutralization dose for this antibody under a specific set of conditions. The Neutralization

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.

neutralization dose for this antibody under a specific set of conditions. The neutralization Dose50 (ND50) for this antibody is defined as that concentration of antibody required to yield one-half maximal inhibition of the cell surface CXCR-4 mediated SDF-1/PBSF response on a responsive cell line, at a specific SDF-1/PBSF concentration.

Commercially available at R&D Systems (Cat# MAB172)

Endotoxin: 9.445 EU/mL*

*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:	-20°C.
Contributor:	DAIDS, NIAID.
References:	Endres MJ, et al. Cell 87:745, 1996.
NOTE:	Acknowledgement for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Anti-Human CXCR4 Monoclonal (44716)."
Last Updated	March 01, 2016

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