NIH AIDS Reagent Program
20301 Century Boulevard
Building 6, Suite 200
Germantown, MD 20874
USA

Phone: 240 686 4740
Fax: 301 515 4015
aidsreagent.org

DATA SHEET

Reagent:	Anti-Human CXCR4 Polyclonal (EL)
Catalog Number:	11236
Lot Number:	070996
Provided:	50 µg per vial (1 µg/µL).
Host:	Rabbit anti-CXCR-4 polyclonal antibody was raised against a peptide corresponding to amino acids 182 to 196 in the second extracellular loop (EL) of human CXCR4 (3,9).
Description:	Human immunodeficiency virus (HIV) and related viruses require coreceptors, in addition to CD4, to infect target cells. Some G protein-coupled receptors including CCR5, CXCR4, CCR3, CCR2b and CCR8 in the chemokine receptor family, and four new human molecules GPR15, STRL33, GPR1 and V28 were recently identified as HIV coreceptors (1). Among them, CXCR4 (fusin, LESTR or HUMSTR) is a principal coreceptor for T-cell tropic strains of HIV-1 fusion and entry of human white blood cells (2,3). CXCR4 is also required for the infection by dual-tropic strains of HIV-1 and mediates CD-4 independent infection by HIV-2 (4,5). The a-chemokine SDF-1 is the ligand for CXCR4 and prevents infection by T-tropic HIV-1 (6,7). CXCR4 associates with the surface CD4-gp120 complex before HIV enters target cells (8). CXCR4 messenger RNA levels correlated with HIV-1 permissiveness in diverse human cell types (2). Antibodies to CXCR4 block HIV-1 and HIV-2 fusion and infection of human target cells (2,5,10). The amino-terminal domain and the second extracellular loop of CXCR4 serve as HIV biding sites (10,11).
Special Characteristics:	CXCR4 antibody can be used for western blot at 1:500-1:1000 diultion (optimal dilution should be determined by user). HeLa whole cell lysate can be used a positive control. CXCR4 antibody is human and mouse reactive.
Recommended Storage:	4°C.
Contributor:	ProSci, Incorporated

References:

1. Dimitrov DS. *Cell* 1997;**91**:721-730.
2. Feng Y et al. *Science* 1996;**272**:872-7.
3. Berson JF et al. *J Virol* 1996;**70**:6288-95.
4. Doranz BJ et al. *Cell* 1996;**85**:1149-1158.
5. Endres MJ et al. *Cell* 1996;**87**:745-756.
6. Bleul CC et al. *Nature* 1996;**382**:829-833.
7. Oberlin E et al. *Nature* 1996;**382**:833-835.
8. Lapham CK et al. *Science* 1996;**274**:602-5.
9. Leoetscher M et al. *J Biol Chem* 1994;**269**:232-237.
10. Brelot A et al. *J Virol* 1997;**71**:4744--954751.
11. Lu Z et al. *Proc Natl Acad Sci USA* 1997;**94**:6426-6431.

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS from ProSci Inc.: Anti-Human CXCR4 Polyclonal (EL)." Also include the references cited above in any publications.