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. 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. CXCR4 is also required for the infection by dual-tropic strains of HIV-1 and mediates CD-4 independent infection by HIV-2. The α-chemokine SDF-1 is the ligand for CXCR4 and prevents infection by T-tropic HIV-1. CXCR4 associates with the surface CD4-gp120 complex before HIV enters target cells. CXCR4 messenger RNA levels correlated with HIV-1 permissiveness in diverse human cell types. Antibodies to CXCR4 block HIV-1 and HIV-2 fusion and infection of human target cells. The amino-terminal domain and the second extracellular loop of CXCR4 serve as HIV binding sites.

**IMMUNOGEN**

Synthetic peptide corresponding to amino acids 1 to 14 of the N terminal of the human CXCR4 receptor.

**APPLICATIONS**

Western Blot, Immunocytochemistry, Immunoprecipitation

**SPECIES REACTIVITY**

Human, Mouse

**ACCESSION NUMBER**

Human P61073
**POSITIVE CONTROL/TISSUE EXPRESSION**

HeLa cell lysate

**COMMENTS**

Detects CXCR4 receptor by Western blot at 1-2 µg/ml. Detects an approximately 42 kDa band in HeLa cell lysate. Can also be used for immunoprecipitation and immunocytochemistry at 10 µg/ml. Optimal concentration should be evaluated by serial dilutions.

**PURIFICATION**

Antigen Immunoaffinity Purification

**SHIP CONDITIONS**

Ship at ambient temperature, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**


**PRODUCT SPECIFIC REFERENCES**