

**CXCR4 Antibody**  
**Catalog # ASC10001****Specification**

---

**CXCR4 Antibody - Product Information**

Application	WB, ICC, IF
Primary Accession	<a href="#">CXCR4</a>
Other Accession	<a href="#">NP_003458</a> , <a href="#">4503175</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	CXCR4 antibody can be used for Western blot at 1 - 2 µg/mL dilution and for immunoprecipitation and immunocytochemistry at 10 µg/mL. Immunofluorescence starting at 20 µg/mL. Flow Cytometry at 0.1 µg/ml

**CXCR4 Antibody - Additional Information**Gene ID **7852****Other Names**

CXCR4 Antibody: FB22, HM89, LAP3, LCR1, NPYR, WHIM, CD184, LESTR, NPY3R, NPYRL, HSY3RR, NPYY3R, D2S201E, chemokine (C-X-C motif) receptor 4

**Target/Specificity**

CXCR4; CXCR4 Antibody is predicted to not cross-react with other CXCR family members.

**Reconstitution & Storage**

CXCR4 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

CXCR4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

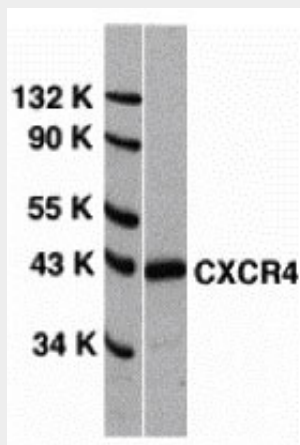
**CXCR4 Antibody - Protein Information****CXCR4 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

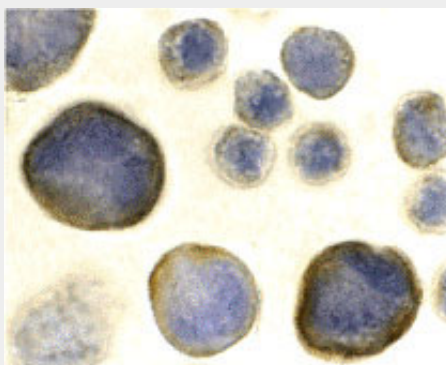
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

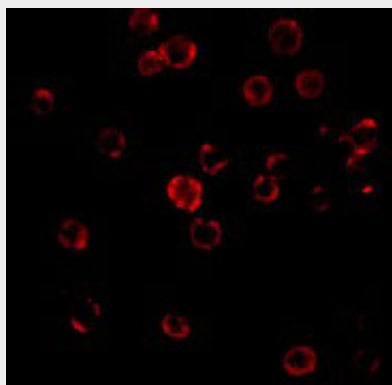
### CXCR4 Antibody - Images



Western blot analysis of CXCR4 in HeLa whole cell lysate with CXCR4 antibody at 0.5 µg/mL.



Immunocytochemistry of CXCR4 in HeLa cells with CXCR4 antibody at 2 µg/mL.



Immunofluorescence of CXCR4 in HeLa cells with CXCR4 antibody at 20 µg/mL.

### CXCR4 Antibody - Background

CXCR4 Antibody: 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  $\alpha$ -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.

#### **CXCR4 Antibody - References**

Dimitrov DS. Cell 1997;91:721-730  
Feng Y et al. Science 1996;272:872-7  
Berson JF et al. J Virol 1996;70:6288-95  
Doranz BJ et al. Cell 1996;85:1149-1158