

## Product datasheet for **TA305935**

### CXCR4 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB: 1 - 2 ug/mL, IP, ICC: 10 ug/g/mL, IF: 10 ug/g/mL, FACS: 10 ug/mL
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	CXCR4 antibody was raised against a peptide corresponding to 14 amino acids near the amino terminus of human CXCR4. The immunogen is located within the first 50 amino acids of CXCR4.
Formulation:	PBS containing 0.02% sodium azide.
Purification:	Antibody is DEAE purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	C-X-C motif chemokine receptor 4
Database Link:	<a href="#">NP_003458</a> <a href="#">Entrez Gene 7852 Human</a> <a href="#">P61073</a>



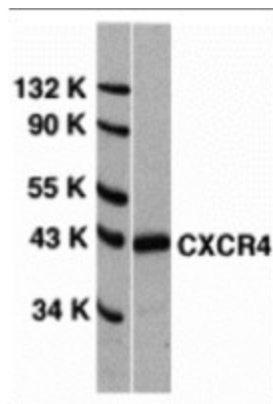
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**Background:**

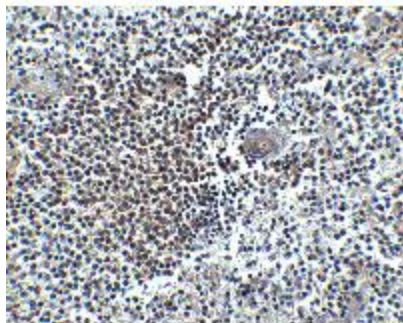
Human immunodeficiency virus (HIV) and related viruses require coreceptors, in addition to CD4, to infect target cells. Some G protein-coupled receptors including CCR5, CXCR4, CCR3, CCR2b and CCR8 in the chemokine receptor family, and four new human molecules GPR15, STRL33, GPR1 and V28 were recently 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.

**Synonyms:**

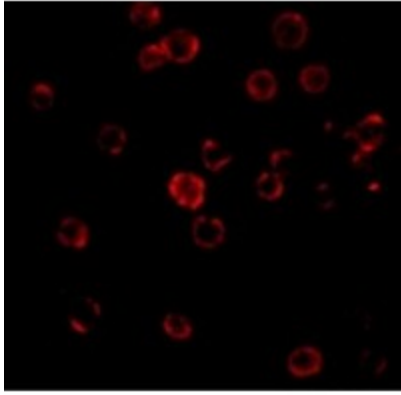
CD184; D2S201E; FB22; HM89; HSY3RR; LAP-3; LAP3; LCR1; LESTR; NPY3R; NPYR; NPYRL; NPYY3R; WHIM

**Product images:**

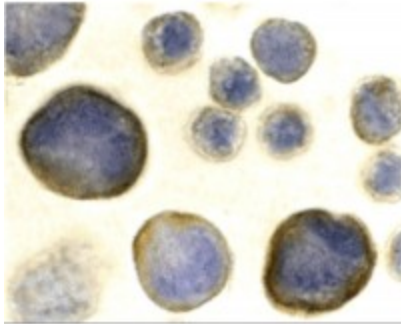
Western blot analysis of CXCR4 in HeLa whole cell lysate with CXCR4 antibody at 0.5ug/ml.



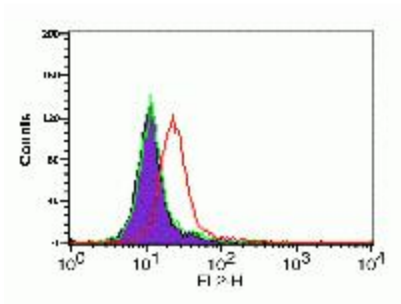
Immunohistochemistry of CXCR4 in human spleen tissue with CXCR4 antibody at 5ug/ml.



Immunofluorescence of CXCR4 in HeLa cells with CXCR4 antibody at 20ug/ml.



Immunocytochemistry of CXCR4 in HeLa cells with CXCR4 antibody at 2ug/ml.



Flow cytometry analysis of HeLa cells using CXCR4 antibody at 0.1ug/ml. Purple: cells without staining, Green: Isotype control. Red : CXCR4 antibody.