

CXCR4 Antibody

Catalog # ASC10001

Product Information

Application	WB, IF, FC, IP, ICC, E
Primary Accession	CXCR4
Other Accession	NP_003458 , 4503175
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CXCR4 antibody can be used for Western blot at 1 - 2 μ g/mL dilution and for immunoprecipitation and immunocytochemistry at 10 μ g/mL. Immunofluorescence starting at 20 μ g/mL. Flow Cytometry at 0.1 μ g/ml

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.

Protein Information

Background

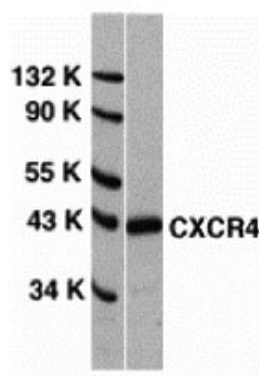
CXCR4 Antibody: Human immunodeficiency virus (HIV) and related viruses require coreceptors, in addition to CD4, to infect target cells. Some G protein-coupled receptors including CCR5, CXCR4, CCR3, CCR2b and CCR8 in the chemokine receptor family, and four new human molecules GPR15, STRL33, GPR1 and V28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

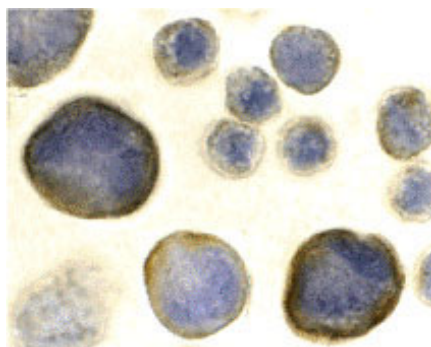
References

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

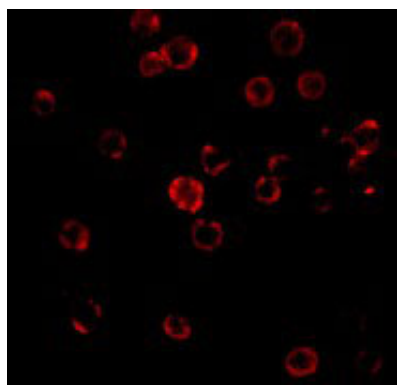
Images



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.