CXCR4 Antibody

Catalog No: #24002

Orders: order@signalwayantibody.com
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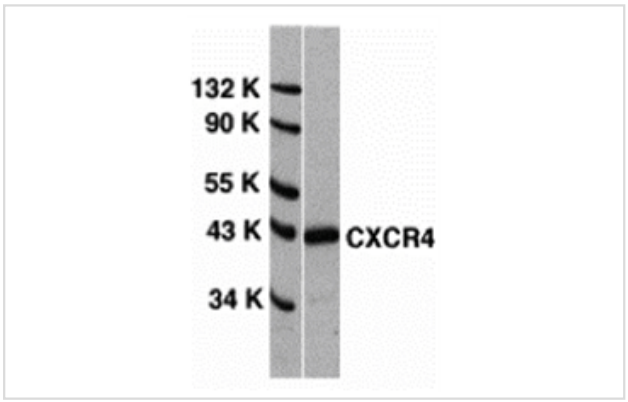
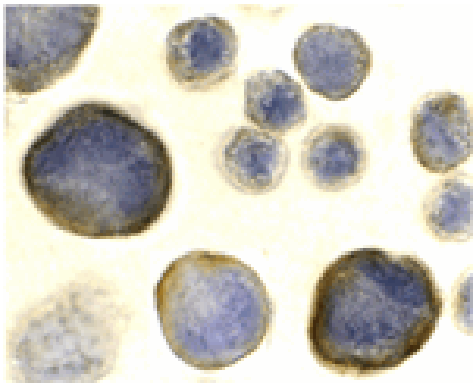
Description

Product Name	CXCR4 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column.
Applications	ELISA,WB,ICC,IF,Flow,IHC-P
Species Reactivity	Hu,Mso'O Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a peptide corresponding to amino acids near the amino terminus of human CXCR4.
Target Name	CXCR4
Accession No.	Swiss-Prot:P61073Gene ID:7852
Uniprot	P61073
GeneID	7852;
Calculated MW	Predicted: 40 kDa Observed: 44 kDa (Post-modification: 2 N-linked glycosylation)
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	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.

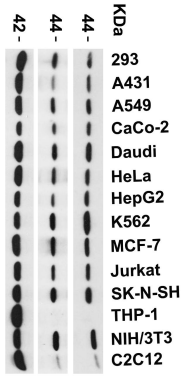
Images



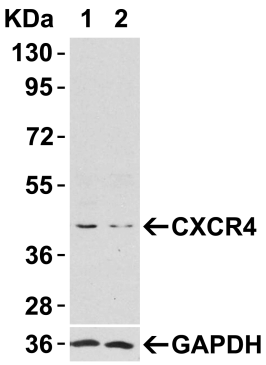
Western blot analysis of CXCR4 in HeLa whole cell lysate with CXCR4 antibody at 0.5 ug/mL.



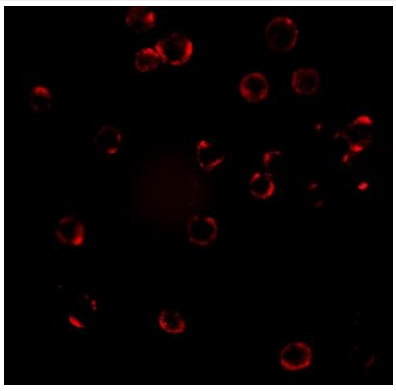
Immunocytochemistry of CXCR4 in HeLa cells with CXCR4 antibody at 2 ug/mL.



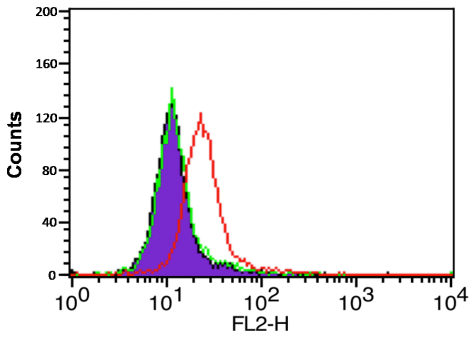
Independent Antibody Validation (IAV) via Protein Expression Profile in Cell LinesLoading: 15 ug of lysates per lane. Antibodies: (1 ug/mL) and beta-actin (1 ug/mL), 1 h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



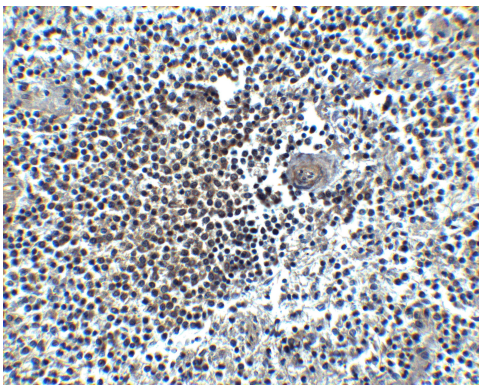
Validation with CXCR4 siRNA Knockdown in HeLa CellsHeLa cells were transfected with control siRNAs (lane 1) or CXCR4 siRNAs (lane 2) Loading: 10 ug of HeLa whole cell lysates per lane. Antibodies: (2 ug/mL), 1 h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunofluorescence Validation of CXCR4 in HeLa CellsImmunofluorescent analysis of 4% paraformaldehyde-fixed HeLa cells labeling CXCR4 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red). Image showing both membrane and cytoplasmic staining on HeLa cells.



Flow Cytometry Validation of CXCR4 in HeLa CellsOverlay histogram showing HeLa cells stained with (red line, 1ug/1x106 cells). 1 h incubation at 4°C in 2% FBS/PBS. Followed by secondary antibody 488 goat anti-rabbit IgG (H+L) at 1/500 dilution for 1 h 4°C.Isotype control antibody (Green line) was mouse IgG1 (1ug/1x106 cells) used under the same conditions.



Immunohistochemistry Validation of CXCR4 in Human Spleen
Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-CXCR4 antibody at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A Goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.

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 a-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.

Note: This product is for in vitro research use only