



CXCR4 Polyclonal Antibody

Catalog No	YP-Ab-12966
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB;IHC;IF
Gene Name	CXCR4
Protein Name	C-X-C chemokine receptor type 4 (CXC-R4) (CXCR-4) (FB22) (Fusin) (HM89) (LCR1) (Leukocyte-derived seven transmembrane domain receptor) (LESTR) (NPYRL) (Stromal cell-derived factor 1 receptor) (SDF-1 r
Immunogen	Synthetic Peptide of CXCR4 AA range: 203-253
Specificity	CXCR4 protein(A220) detects endogenous levels of CXCR4
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000, IHC 1:100-200. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CXCR4; C-X-C chemokine receptor type 4; CXC-R4; CXCR-4; FB22; Fusin; HM89; LCR1; Leukocyte-derived seven transmembrane domain receptor; LESTR; NPYRL; Stromal cell-derived factor 1 receptor; SDF-1 receptor; CD antigen CD184
Observed Band	50kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Cell junction. Early endosome. Late endosome. Lysosome. In unstimulated cells, diffuse pattern on plasma membrane. On agonist stimulation, colocalizes with ITCH at the plasma membrane where it becomes ubiquitinated. In the presence of antigen, distributes to the immunological synapse forming at the T-cell-APC contact area, where it localizes at the peripheral and distal supramolecular activation cluster (SMAC).
Tissue Specificity	Expressed in numerous tissues, such as peripheral blood leukocytes, spleen, thymus, spinal cord, heart, placenta, lung, liver, skeletal muscle, kidney, pancreas, cerebellum, cerebral cortex and medulla (in microglia as well as in astrocytes), brain microvascular, coronary artery and umbilical cord endothelial cells. Isoform 1 is predominant in all tissues tested.
Function	alternative products:Additional isoforms seem to exist,caution:Was originally (PubMed:8329116 and PubMed:8234909) thought to be a receptor for neuropeptide Y type 3 (NPY3R) (NPY3-R),.disease:Defects in CXCR4 are a



cause of WHIM syndrome [MIM:193670]; also called warts, hypogammaglobulinemia, infections, and myelokathexis. WHIM syndrome is an immunodeficiency disease characterized by neutropenia, hypogammaglobulinemia and extensive human papillomavirus (HPV) infection. Despite the peripheral neutropenia, bone marrow aspirates from affected individuals contain abundant mature myeloid cells, a condition termed myelokathexis.,domain:The amino-terminus is critical for ligand binding. Residues in all four extracellular regions contribute to HIV-1 coreceptor activity.,function:Receptor for the C-X-C chemokine CXCL12/SDF-1. Transduces a signal by increasing the intracellular calcium ions level.

Background

C-X-C motif chemokine receptor 4(CXCR4) Homo sapiens This gene encodes a CXC chemokine receptor specific for stromal cell-derived factor-1. The protein has 7 transmembrane regions and is located on the cell surface. It acts with the CD4 protein to support HIV entry into cells and is also highly expressed in breast cancer cells. Mutations in this gene have been associated with WHIM (warts, hypogammaglobulinemia, infections, and myelokathexis) syndrome. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008],

matters needing attention

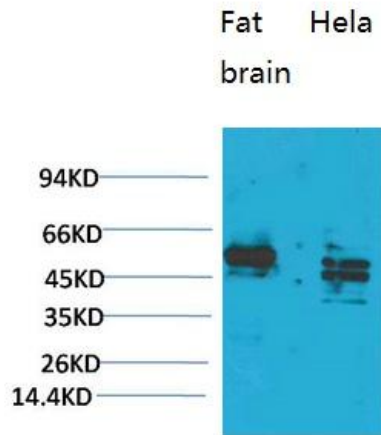
Avoid repeated freezing and thawing!

Usage suggestions

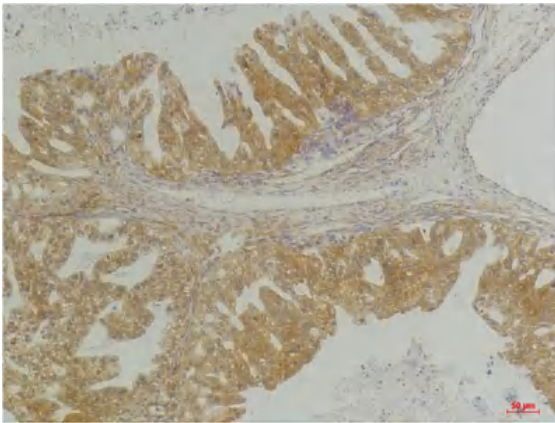
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



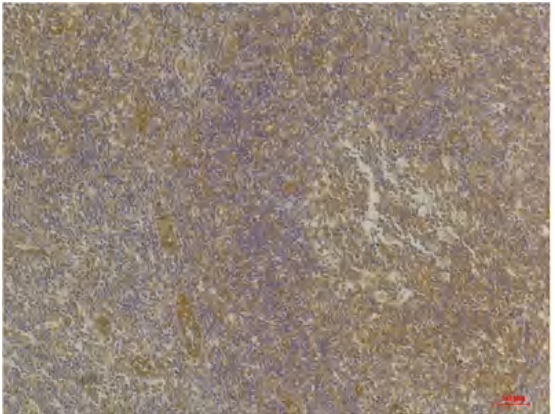
Products Images



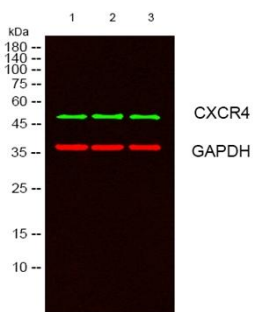
Western blot analysis of 1) Rat Brain Tissue, 2)Hela, with CXCR4 Rabbit pAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma using CXCR4Rabbit pAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Tonsil Tissue using CXCR4Rabbit pAb diluted at 1:200.



Western blot analysis of lysates from 1) Rat Brain Tissue, 2)Hela, 3) HEK293 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night,secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.