Product Name: Fusin Rabbit Polyclonal Antibody
Catalog #: APRab11187

Summary

Production Name	Fusin Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CXCR4
Alternative Names	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
Gene ID	7852.0
SwissProt ID	P61073.The antiserum was produced against synthesized peptide derived from human CXCR4. AA range:300-349

Application

Dilution Ratio	WB 1:500-1:2000, IF-P/IF-F/ICC/IF 1:200-1:1000, ELISA 1:40000.Not yet tested in other applications.

Product Name: Fusin Rabbit Polyclonal Antibody
Catalog #: APRab11187

Molecular Weight 36kDa

Background

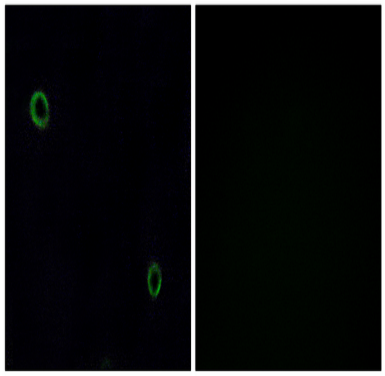
C-X-C motif chemokine receptor 4(CXCR4) Homo sapiens This gene encodes a CXC chemokine receptor specific for stromal cell-derived factor-1. The protein has 7 transmembrane regions and is located on the cell surface. It acts with the CD4 protein to support HIV entry into cells and is also highly expressed 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],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. Involved in haematopoiesis and in cardiac ventricular septum formation. Plays also an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells. Could be involved in cerebellar development. In the CNS, could mediate hippocampal-neuron survival. Acts as a coreceptor (CD4 being the primary receptor) for HIV-1 X4 isolates and as a primary receptor for some HIV-2 isolates. Promotes Env-mediated fusion of the virus.,online information:CXC chemokine receptors entry,online information:CXCR4 entry,online information:CXCR4 mutation db,PTM:O- and N-glycosylated. Asn-11 is the principal site of N-glycosylation. There appears to be very little or no glycosylation on Asn-176. N-glycosylation masks coreceptor function in both X4 and R5 laboratory-adapted and primary HIV-1 strains through inhibiting interaction with their Env glycoproteins. The O-glycosylation chondroitin sulfate attachment does not affect interaction with CXCL12/SDF-1alpha nor its coreceptor activity.,PTM:Sulfation on Tyr-21 is required for efficient binding of CXCL12/SDF-1alpha and promotes its dimerization.,similarity:Belongs to the G-protein coupled receptor 1 family.,subunit:Monomer. Can form dimers. Interacts with HIV-1 surface protein gp120 and Tat.,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.,

Research Area

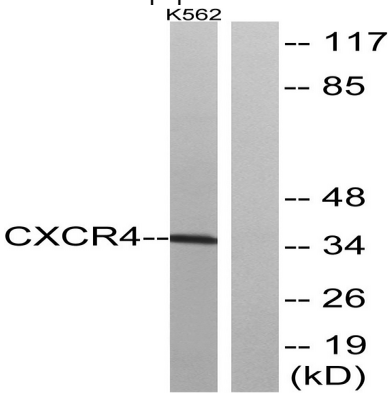
Cytokine-cytokine receptor interaction;Chemokine;Endocytosis;Axon guidance;Leukocyte transendothelial migration;Intestinal immune network for IgA production;

Product Name: Fusin Rabbit Polyclonal Antibody
Catalog #: APRab11187

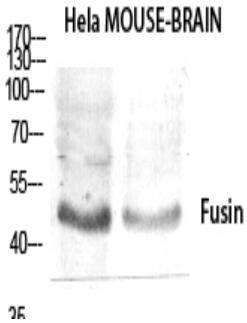
Image Data



Immunofluorescence analysis of A549 cells, using CXCR4 Antibody. The picture on the right is blocked with the synthesized peptide.

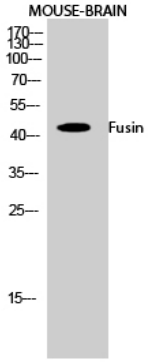


Western blot analysis of lysates from K562 cells, using CXCR4 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Fusin Polyclonal Antibody diluted at 1： 1000

Product Name: Fusin Rabbit Polyclonal Antibody
Catalog #: APRab11187



Western Blot analysis of MOUSE-BRAIN cells using Fusin Polyclonal Antibody diluted at 1： 1000

Note

For research use only.