

CD184 (pS339) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51641

Product Information

Application WB, ICC, IHC-P

Primary Accession P61073

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW39746

Additional Information

Gene ID 7852

Other Names C-X-C chemokine receptor type 4, CXC-R4, CXCR-4, FB22, Fusin, HM89, LCR1,

Leukocyte-derived seven transmembrane domain receptor, LESTR, Lipopolysaccharide-associated protein 3, LAP-3, LPS-associated protein 3, NPYRL, Stromal cell-derived factor 1 receptor, SDF-1 receptor, CD184, CXCR4

Dilution WB~~1:500 ICC~~N/A IHC-P~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name CXCR4

Function Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by

increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation (PubMed:10452968, PubMed:18799424, PubMed:24912431,

PubMed: 28978524). Involved in the AKT signaling cascade

(PubMed:24912431). Plays a role in regulation of cell migration, e.g. during wound healing (PubMed:28978524). Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels (PubMed:20228059). Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:11276205). Involved in hematopoiesis and in cardiac ventricular septum formation. Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or

remodeling processes in endothelial cells. Involved in cerebellar

development. In the CNS, could mediate hippocampal-neuron survival (By

similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell junction. Early endosome. Late endosome. Lysosome. Note=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 Location

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

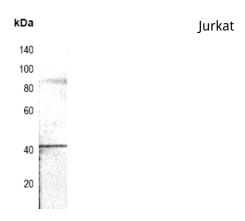
Background

Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. Involved in hematopoiesis and in cardiac ventricular septum formation. Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells. 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.

References

Herzog H.,et al.DNA Cell Biol. 12:465-471(1993). Jazin E.E.,et al.Regul. Pept. 47:247-258(1993). Federsppiel B.,et al.Genomics 16:707-712(1993). Loetscher M.,et al.J. Biol. Chem. 269:232-237(1994). Nomura H.,et al.Int. Immunol. 5:1239-1249(1993).

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