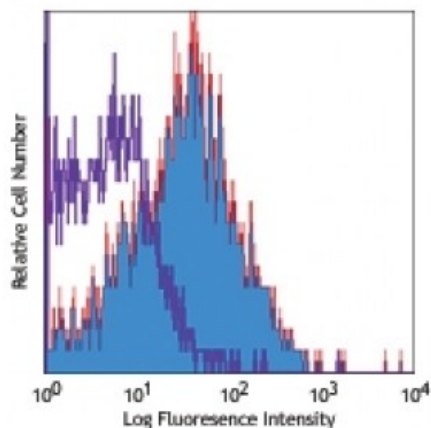


Purified anti-human CD184 (CXCR4)

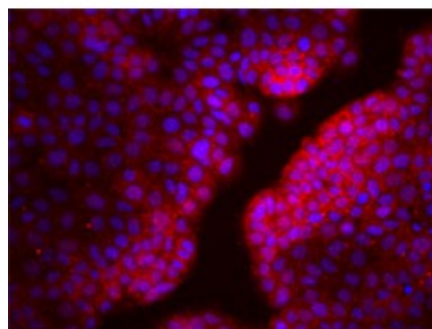
Catalog # / Size:	2132505 / 25 µg 2132510 / 100 µg
Clone:	12G5
Isotype:	Mouse IgG2a, κ
Immunogen:	CP-MAC-infected Sup-T1 cells
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Workshop Number:	VII 70204
Concentration:	0.5



Human peripheral blood lymphocytes stained with purified 12G5, followed by biotinylated anti-mouse IgG and Sav-PE

Applications:

Applications:	Immunofluorescence
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 microg per 10^6 cells in 100 microL volume or 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Application Notes:	Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraffin-embedded tissue sections ¹¹ , immunocytochemistry ³ , immunofluorescence microscopy ^{2,6} , and blocking of CD4-independent infection by HIV-2 and CD4-dependent infection by some T cell-tropic isolates of HIV-1 ^{4,5} . Clone 12G5 may not be suitable for Western blotting. ¹⁰ The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 306512).
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MCF7 breast cancer cell line was stained with anti-human CD184, detected with anti-mouse DyLight™ 649, and nuclear counterstained with DAPI. Images were acquired with a TE300 fluorescence microscope with a 20X objective. Data provided by: Er

Application References:	<ol style="list-style-type: none"> McKnight A, <i>et al.</i> 1997. <i>J. Virol.</i> 71:1692. Endres MJ, <i>et al.</i> 1996. <i>Cell</i> 87:745. (Immunogen, IF) Volin MV, <i>et al.</i> 1998. <i>Biochem. Biophys. Res. Commun.</i> 242:46. (ICC) Brndt C, <i>et al.</i> 1998. <i>P. Natl. Acad. Sci. USA</i> 95:12556. (Block) Ullrich CK, <i>et al.</i> 2000. <i>Blood</i> 96:1438. (Block) Murga M, <i>et al.</i> 2005. <i>Blood</i> 105:1992. (IF)
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 8. Isnardi I, *et al.* 2010. *Blood* 115:5026. [PubMed](#)
 9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
 10. Fischer T, *et al.* 2008. *PLoS One* 3:e4069.
 11. Schmid BC, *et al.* 2004. *Breast Cancer Res. Treat.* 84:247. (IHC)
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Description: CD184, also known as fusin or CXCR4, is a 45 kD seven transmembrane G-protein-linked CXC chemokine receptor. CD184 is widely expressed on blood and tissue cells, including B and T cells, monocytes, macrophages, dendritic cells, granulocytes, megakaryocytes/platelets, lymphoid, myeloid precursor cells, endothelial cells, epithelial cells, astrocytes, and neurons, among other tissue cells. CD184 is the receptor for CXC chemokine SDF-1, mediates blood cell migration, and is involved in B lymphopoiesis and myelopoiesis, cardiogenesis, blood vessel formation, and cerebellar development. CXCR4 is also a coreceptor of X4 HIV-1 and an alternative receptor for some isolates of HIV-2.

Antigen
References:

1. Berger E, *et al.* 1999. *Annu. Rev. Immunol.* 17:657.
2. Loetscher P, *et al.* 2000. *Adv. Immunol.* 74:127.
3. Murphy P, *et al.* 2000. *Pharmacol. Rev.* 52:145.