

PE/Cy7 anti-human CD184 (CXCR4)

Catalog # / Size: 2132570 / 100 tests
2132565 / 25 tests

Clone: 12G5

Isotype: Mouse IgG2a, κ

Immunogen: CP-MAC-infected Sup-T1 cells

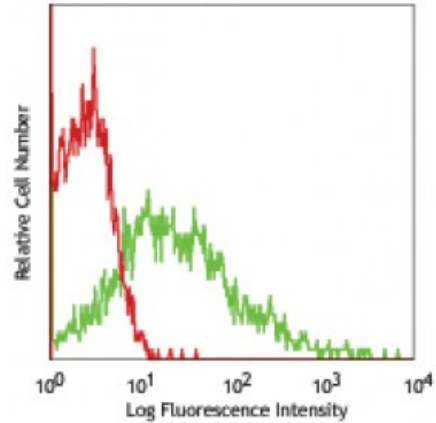
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: VII 70204

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with 12G5 PE/Cy7

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 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 sections¹¹, immunocytochemistry³, 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).

Application References:

1. McKnight A, *et al.* 1997. *J. Virol.* 71:1692.
2. Endres MJ, *et al.* 1996. *Cell* 87:745. (Immunogen, IF)
3. Volin MV, *et al.* 1998. *Biochem. Biophys. Res. Commun.* 242:46. (ICC)
4. Berndt C, *et al.* 1998. *P. Natl. Acad. Sci. USA* 95:12556. (Block)
5. Ullrich CK, *et al.* 2000. *Blood* 96:1438. (Block)
6. Murga M, *et al.* 2005. *Blood* 105:1992. (IF)
7. Thompson BD. 2007. *J. Biol. Chem.* 282:9547. (FC) [PubMed](#)
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)
12. Raposos RA, *et al.* 2013. *J Leukoc Biol.* 94:1051. [PubMed](#)
13. Martinez-Cingolani C, *et al.* 2014. *Blood.* 124:2411. [PubMed](#)
14. Lourenco S, *et al.* 2015. *J Immunol.* 194:3463. [PubMed](#)

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.