

PE/Cy7 anti-human CD184 (CXCR4)

Catalog # / Size: 306513 / 25 tests
306514 / 100 tests

Clone: 12G5

Isotype: Mouse IgG2a, κ

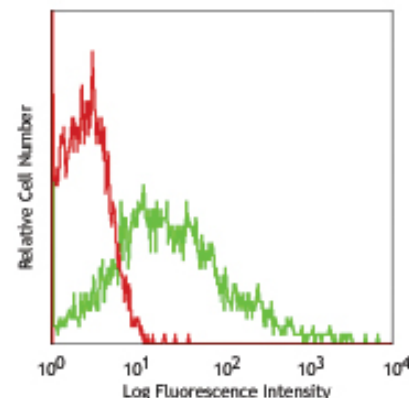
Workshop Number: VII 70204

Reactivity: Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus, Sooty Mangabey, African Green

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).

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with 12G5 PE/Cy7

Applications:

Applications: FC - Quality tested

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 µl to 5 µl per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections^{2,3}, immunofluorescence microscopy⁶, 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).

Cy3, Cy5, Cy5.5 and Cy7 are subject to proprietary rights of GE Healthcare Bio-Sciences Corp. and Carnegie Mellon University and made and sold under license from GE Healthcare Bio-Sciences Corp. Sale of this product is licensed for research use only.

Application References:

- McKnight A, *et al.* 1997. *J. Virol.* 71:1692.
- Endres MJ, *et al.* 1996. *Cell* 87:745. (IHC)
- Volin MV, *et al.* 1998. *Biochem. Biophys. Res. Commun.* 242:46. (IHC)
- Berndt C, *et al.* 1998. *P. Natl. Acad. Sci. USA* 95:12556. (Block)
- Ullrich CK, *et al.* 2000. *Blood* 96:1438. (Block)
- Murga M, *et al.* 2005. *Blood* 105:1992. (IF)
- Thompson BD. 2007. *J. Biol. Chem.* 282:9547. (FC) PubMed
- Isnardi I, *et al.* 2010. *Blood* 115:5026. PubMed
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Fischer T, *et al.* 2008. *PLoS One* 3:e4069.

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. The 12G5 antibody has been reported to block CD4-independent infection by HIV-2 and CD4-dependent infection by some T cell-tropic isolates of HIV-1.

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

Related Products:

Product
PE/Cy7 Mouse IgG2a, κ Isotype Ctrl
Cell Staining Buffer
RBC Lysis Buffer (10X)
Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone
MOPC-173

Application
FC, ICFC
FC, ICC, ICFC
FC, ICFC
FC, ICC, ICFC



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