Product Data Sheet

PE anti-human CD184 (CXCR4)

| Catalog # / Size: | 2132530 / 100 tests 2132525 / 25 tests | ive Cell Number |
|-----------------------|---|--|
| 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 under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody. | 10 ⁰ 10 ¹ |
| Formulation: | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA). | Log Flu Human periph lymphocytes s |
| Workshop Number: | VII 70204 | |
| Concentration: | Lot-specific | |

10⁰ 10¹ 10² 10³ 10⁴ Log Fluoresence Intensity

Human peripheral blood ymphocytes stained with 12G5 PE

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 sections ¹¹ , immunocytochemistry3, immunofluorescence microscopy ^{2,6,15} , 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 TM purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 306512). |
| Application References: | 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) Berndt 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) Thompson BD. 2007. <i>J. Biol. Chem.</i> 282:9547. (FC) PubMed Isnardi I, <i>et al.</i> 2010. <i>Blood</i> 115:5026. PubMed Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC) Fischer T, <i>et al.</i> 2004. <i>Breast Cancer Res. Treat.</i> 84:247. (IHC) Wang B, <i>et al.</i> 2013. <i>Carcinogenesis.</i> 35:282. PubMed Belengio F, <i>et al.</i> 2013. <i>Immunobiology.</i> 218:76. PubMed Andl M, <i>et al.</i> 2014. <i>PLoS One.</i> 9:112140. PubMed Alon R, <i>et al.</i> 2008. <i>J. Leukoc. Biol.</i> 84:1130-40. (FC, IF) PubMed |

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- **Description:** CD184, also known as fusin or CXCR4, is a 45 kD seven transmembrane Gprotein-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 1. Berger E, et al. 1999. Annu. Rev. Immunol. 17:657.
- References:
- Loetscher P, *et al.* 2000. *Adv. Immunol.* 74:127.
 Murphy P, *et al.* 2000. *Pharmacol. Rev.* 52:145.