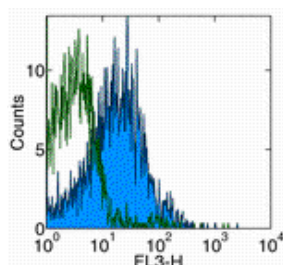


Anti-Human CD184 (CXCR4) Functional Grade Purified

Catalog Number: 16-9999

Also Known As: Fusin

RUO: For Research Use Only



Staining of normal human peripheral blood cells with Anti-Human CD184 (CXCR4) PE-Cy5. Autofluorescence is indicated by open histogram. Cells in the lymphocyte population were used for analysis.


Product Information

Contents: Anti-Human CD184 (CXCR4) Functional Grade Purified

Formulation: aqueous buffer, no sodium azide

REF **Catalog Number:** 16-9999


Clone: 12G5

 **Temperature Limitation:** Store at 2-8°C.

Concentration: 1 mg/ml

LOT **Batch Code:** Refer to Vial

Host/Isotype: Mouse IgG2a, κ

 **Use By:** Refer to Vial

Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Description

The 12G5 monoclonal antibody reacts with human CXCR4 (CD184), also termed Fusin, LESTR, or HUMSTR. Fusin is a member of the G-protein-coupled chemokine receptor family with seven membrane-spanning domains, and functions as a coreceptor for X4 HIV-1 entry into CD4⁺ cells. CXCR4 is expressed predominantly on naive T cell subsets of peripheral blood and is rapidly upregulated by PHA and IL-2 stimulation. 12G5 shows partial inhibition of chemotaxis and calcium influx induced by SDF-1 (the natural ligand of CXCR4), blocks CD4-independent HIV-2 infection, and blocks CD4-dependent infection by some T-tropic HIV-1 isolates.

Applications Reported

The 12G5 antibody has been reported for use in flow cytometric analysis. It has also been reported in blocking of CXCR4 in functional studies.

Applications Tested

The 12G5 antibody has been tested by flow cytometric analysis of human peripheral leukocytes. This can be used at less than or equal to 0.5 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

McKnight, A. et al. (1997). "Inhibition of human immunodeficiency virus fusion by a monoclonal antibody to a coreceptor (CXCR4) is both cell type and virus strain dependent." *J Virol* 71(2): 1692-6.
 Bleul, C. et al. (1997). "The HIV coreceptors CXCR4 and CCR5 are differentially expressed and regulated on human T lymphocytes." *Proc Natl Acad Sci U S A* 94(5): 1925-30.

Related Products

16-4724 Mouse IgG2a K Isotype Control Functional Grade Purified

