

CD184 (CXCR4) Monoclonal Antibody (12G5), PE-Cyanine5, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Rhesus monkey
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), PE-Cyanine5, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	12G5
Conjugate	PE-Cyanine5
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10670201

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	10 Publications

Product Specific Information

Description: The 12G5 monoclonal antibody reacts with human CD184 (CXCR4), also termed Fusin, LESTR, or HUMSTR. CD184 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. CD184 is expressed predominantly on naive T cell subsets of peripheral blood and is rapidly upregulated by PHA and IL-2 stimulation. The 12G5 antibody shows partial inhibition of chemotaxis and calcium influx induced by SDF-1 (the natural ligand of CD184), 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.

Applications Tested: This 12G5 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.5 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

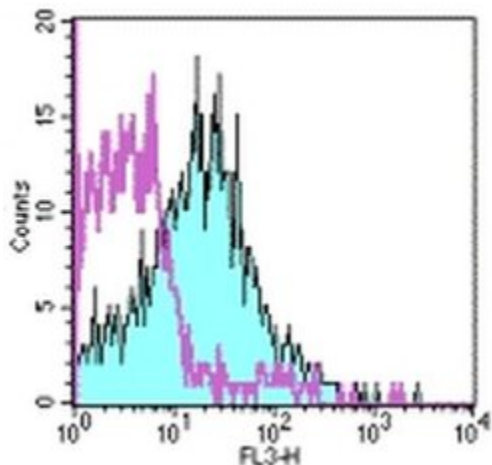
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency

/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 667 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD184 (CXCR4) Monoclonal Antibody (12G5), PE-Cyanine5, eBioscience™



CD184 (CXCR4) Antibody (15-9999-42) in Flow

Staining of normal human peripheral blood cells with staining buffer (autofluorescence) (open histogram) or Anti-Human CD184 (CXCR4) PE-Cyanine5 (filled histogram). Cells in the lymphocyte gate were used for analysis.

10 References

Flow Cytometry (10)

JCI insight

Differential transcriptome and development of human peripheral plasma cell subsets.

"15-9999 was used in Flow cytometry/Cell sorting to study the heterogeneity of human antibody secreting cells after vaccination."

Authors: Garimalla S, Nguyen DC, Halliley JL, Tipton C, Rosenberg AF, Fucile CF, Saney CL, Kyu S, Kaminski D, Qian Y, Scheuermann RH, Gibson G, Sanz I, Lee FE

Species
Human

Dilution
Not Cited

Year
2019

Blood

AMD3100 mobilizes hematopoietic stem cells with long-term repopulating capacity in nonhuman primates.

"15-9999 was used in Flow cytometry/Cell sorting to study how AMD3100-mobilized CD34(+) cells represent an alternative source of hematopoietic stem cells for clinical stem cell transplantation and genetic manipulation with integrating retroviral vectors."

Authors: Larochelle A, Krouse A, Metzger M, Orlic D, Donahue RE, Fricker S, Bridger G, Dunbar CE, Hematti P

Species
Rhesus monkey

Dilution
Not Cited

Year
2006

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

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