

CD184 (CXCR4) Monoclonal Antibody (12G5), PE-eFluor™ 610, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), PE-eFluor™ 610, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	12G5
Conjugate	PE-eFluor™ 610
Excitation/Emission Max	565/606 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2815322

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (1.0 µg)/test	13 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: This 12G5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 12G5 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (1.0 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.

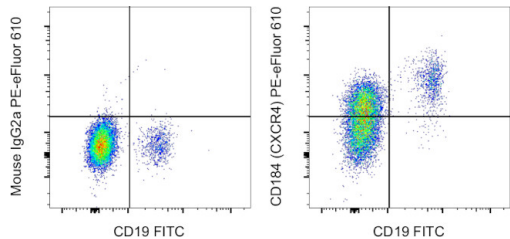
PE-eFluor 610 can be excited with laser lines from 488-561 nm and emits at 607 nm. We recommend using a 610/20 band pass filter (equivalent to PE-Texas Red). Please make sure that your instrument is capable of detecting this fluorochrome.

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

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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: 607 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser

Product Images For CD184 (CXCR4) Monoclonal Antibody (12G5), PE-eFluor™ 610, eBioscience™



CD184 (CXCR4) Antibody (61-9999-42) in Flow
Normal human peripheral blood cells were stained with CD19 Monoclonal Antibody, FITC (Product # 11-0199-42) and Mouse IgG2a kappa Isotype Control, PE-eFluor 610 (Product # 61-4724-80) (left) or CD184 (CXCR4) Monoclonal Antibody, PE-eFluor 610 (right). Cells in the lymphocyte gate were used for analysis.

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13 References

Flow Cytometry (13)

International journal of cancer	Year 2023
Dynamics of CXCR4 positive circulating tumor cells in prostate cancer patients during radiotherapy. "Published figure using CD184 (CXCR4) monoclonal antibody (Product # 61-9999-42) in Flow Cytometry" Authors: Klusa D,Lohaus F,Franken A,Baumbach M,Cojoc M,Dowling P,Linge A,Offermann A,Löck S,Hušman D, Rivandi M,Polzer B,Freytag V,Lange T,Neubauer H,Kücken M,Perner S,Hölscher T,Dubrovskaya A,Krause M,Kurth I, Baumann M,Peitzsch C	
International journal of molecular sciences	Year 2023
Airway and Lung Organoids from Human-Induced Pluripotent Stem Cells Can Be Used to Assess CFTR Conductance. "Published figure using CD184 (CXCR4) monoclonal antibody (Product # 61-9999-42) in Flow Cytometry" Authors: Demchenko A,Kondratieva E,Tabakov V,Efremova A,Salikhova D,Bukharova T,Goldshtein D,Balyasin M, Bulatenko N,Amelina E,Lavrov A,Smirnikhina S	

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