

CD184 (CXCR4) Monoclonal Antibody (12G5), Functional Grade, eBioscience

Product Details	
Size	50 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Functional Grade, eBioscience
Class	Monoclonal
Type	Antibody
Clone	12G5
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage Conditions	4° C
RRID	AB_469311

Applications	Tested Dilution	Publications
Western Blot (WB)	-	3 Publications
Flow Cytometry (Flow)	0.5 µg/test	1 Publication
Neutralization (Neu)	Assay-Dependent	1 Publication
Functional Assay (FN)	Assay-Dependent	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

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. It has also been reported in blocking of CXCR4 in functional studies. (Fluorochrome-conjugated 12G5 is recommended for use in flow cytometry).

Applications Tested: The 12G5 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This

can be used at less than or equal to 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

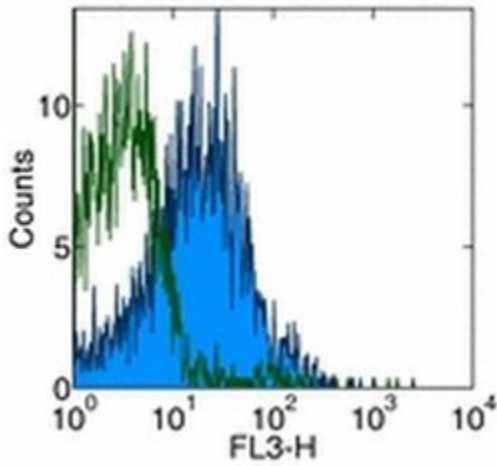
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

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

Aggregation: Less than 10%, as determined by HPLC.

Product Images For CD184 (CXCR4) Monoclonal Antibody (12G5), Functional Grade, eBioscience



CD184 (CXCR4) Antibody (16-9999-81) 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.

[View more figures on thermofisher.com](https://www.thermofisher.com)

7 References

Western Blot (3)

Virology journal

Human cytomegalovirus infection inhibits CXCL12- mediated migration and invasion of human extravillous cytotrophoblasts.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 16-9999-81) in Neutralization"

Authors: Warner JA,Zwezdaryk KJ,Day B,Sullivan DE,Pridjian G,Morris CA

Species
Human

Dilution
Not Cited

Year
2012

PloS one

Osteopontin enhances the expression and activity of MMP-2 via the SDF-1/CXCR4 axis in hepatocellular carcinoma cell lines.

Authors: Zhang R,Pan X,Huang Z,Weber GF,Zhang G

Species
Human

Dilution
Not Cited

Year
2012

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

Flow Cytometry (1)

Stem cells (Dayton, Ohio)

ST8SIA4-Dependent Polysialylation is Part of a Developmental Program Required for Germ Layer Formation from Human Pluripotent Stem Cells.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 16-9999-81) in Flow Cytometry"

Authors: Berger RP,Sun YH,Kulik M,Lee JK,Nairn AV,Moremen KW,Pierce M,Dalton S

Species
Not Applicable

Dilution
Not Cited

Year
2016

Neutralization (1)

Virology journal

Human cytomegalovirus infection inhibits CXCL12- mediated migration and invasion of human extravillous cytotrophoblasts.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 16-9999-81) in Neutralization"

Authors: Warner JA,Zwezdaryk KJ,Day B,Sullivan DE,Pridjian G,Morris CA

Species
Human

Dilution
Not Cited

Year
2012

More applications with references on thermofisher.com

FN (1)

Misc (1)

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