

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	18 Publications
Neutralization (Neu)	Assay-Dependent	2 Publications
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.

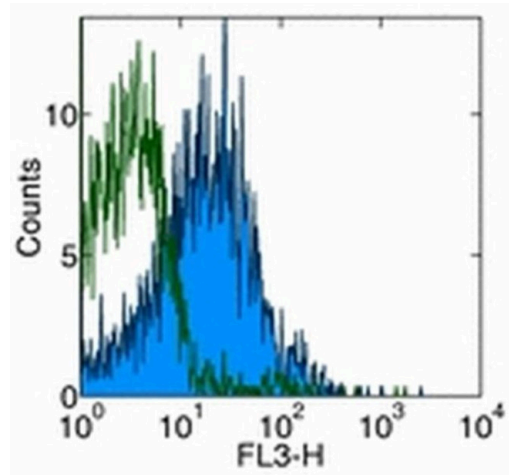
Filtration: 0.2 µm post-manufacturing filtered.

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.

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Western Blot (3)

<p>Biochemistry</p> <p>Antibody epitopes on g protein-coupled receptors mapped with genetically encoded photoactivatable cross-linkers.</p> <p>"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 16-9999-81) in Western Blot"</p> <p>Authors: Ray-Saha S,Huber T,Sakmar TP</p>	<p>Year</p> <p>2014</p>
<p>Virology journal</p> <p>Human cytomegalovirus infection inhibits CXCL12- mediated migration and invasion of human extravillous cytotrophoblasts.</p> <p>"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 16-9999-81) in Western Blot"</p> <p>Authors: Warner JA,Zwezdaryk KJ,Day B,Sullivan DE,Pridjian G,Morris CA</p>	<p>Year</p> <p>2012</p> <p>Species</p> <p>Human</p>

View more WB references on thermofisher.com

Flow Cytometry (18)

<p>International journal of cancer</p> <p>Dynamics of CXCR4 positive circulating tumor cells in prostate cancer patients during radiotherapy.</p> <p>"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 16-9999-81) in Flow Cytometry"</p> <p>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</p>	<p>Year</p> <p>2023</p>
<p>International journal of molecular sciences</p> <p>Airway and Lung Organoids from Human-Induced Pluripotent Stem Cells Can Be Used to Assess CFTR Conductance.</p> <p>"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 16-9999-81) in Flow Cytometry"</p> <p>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</p>	<p>Year</p> <p>2023</p>

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More applications with references on thermofisher.com

- Neu (2)
- FN (1)
- Misc (1)

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