

CD184 (CXCR4) Monoclonal Antibody (2B11), Alexa Fluor™ 488, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Alexa Fluor™ 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2B11
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_953573

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	1 µg/test	17 Publications

Product Specific Information

Description: The 2B11 monoclonal antibody reacts with mouse and human CXCR4, also known as CD184, 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. In addition it has been shown to play a role in lymphocyte migration. The ligand for CXCR4 is SDF1. CXCR4 is required for maintenance of granulocyte progenitors in the bone marrow and essential for B cell development. Expression of CXCR4 is different between mice and human. In the thymus CXCR4 is restricted to CD4+CD8+ cells while in the spleen predominant expression is found on B lymphocytes.

The monoclonal antibody 2B11 recognizes the amino terminus of CXCR4 and has been reported to have functional activity; it does not block SDF1a but causes internalization of the receptor.

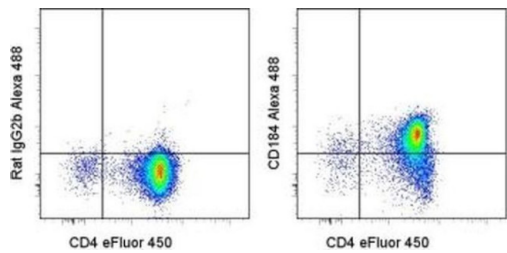
Applications Reported: This 2B11 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 2B11 antibody has been tested by flow cytometric analysis of mouse thymocytes. This can be used at less than or equal to 1 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.

Excitation: 488 nm; Emission: 519 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD184 (CXCR4) Monoclonal Antibody (2B11), Alexa Fluor™ 488, eBioscience™



CD184 (CXCR4) Antibody (53-9991-80) in Flow
Staining of C57Bl/6 thymocytes with Anti-Mouse CD4 eFluor® 450 (Product # 48-0042-82) and 0.5 µg of Rat IgG2b kappa Isotype Control Alexa Fluor® 488 (Product # 53-4031-80) (left) or 0.5 µg of Anti-Mouse CD184 (CXCR4) Alexa Fluor® 488 (right). Total viable cells were used for analysis.

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Immunocytochemistry (3)

Nature communications

Precardiac organoids form two heart fields via Bmp/Wnt signaling.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 53-9991-80) in Immunofluorescence"

Authors: Andersen P,Tampakakis E,Jimenez DV,Kannan S,Miyamoto M,Shin HK,Saberi A,Murphy S,Sulistio E,Chelko SP,Kwon C

Year
2018

PloS one

Optochemokine Tandem for Light-Control of Intracellular Ca²⁺.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 53-9991-80) in Immunofluorescence"

Authors: Feldbauer K,Schlegel J,Weissbecker J,Sauer F,Wood PG,Bamberg E,Terpitz U

Year
2017

[View more ICC/IF references on thermofisher.com](#)

Flow Cytometry (17)

NPJ vaccines

Enhanced germinal center reaction by targeting vaccine antigen to major histocompatibility complex class II molecules.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 53-9991-80) in Flow Cytometry"

Authors: Andersen TK,Huszthy PC,Gopalakrishnan RP,Jacobsen JT,Fauskanger M,Tveita AA,Grødeland G,Bogen B

Year
2023

Journal of medicinal chemistry

Designing Synthetic, Sulfated Glycosaminoglycan Mimetics That Are Orally Bioavailable and Exhibiting *In Vivo* Anticancer Activity.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 53-9991-80) in Flow Cytometry"

Authors: Morla S,Ravikumar O,O'Hara C,Boothello R,Vera A,Abdelfadiel EI,Fayyad R,Afosah DK,Sharon C,Fernandez L,Shah SA,Patel BB,Desai UR

Year
2023

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More applications with references on thermofisher.com

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