

# CD184 (CXCR4) Monoclonal Antibody (2B11), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Hamster, Mouse, Human
Host/Isotope	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2B11
Conjugate	PE
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_891391

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	1 µg/test	28 Publications
Immunocytochemistry (ICC)	-	1:100	1 Publication
Immunofluorescence (IF)	-	1:100	1 Publication

## 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.

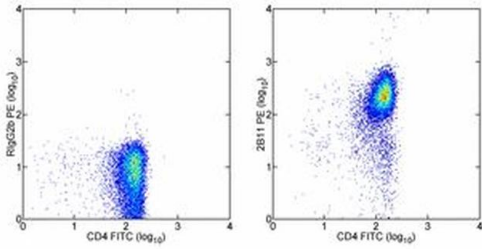
Applications Tested: This 2B11 antibody has been tested by flow cytometric analysis of mouse thymocytes. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest. It is recommended that the incubation time with 2B11

antibody by at least 45 minutes for optimal staining.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For CD184 (CXCR4) Monoclonal Antibody (2B11), PE, eBioscience™



### CD184 (CXCR4) Antibody (12-9991-82) in Flow

Staining of BALB/c thymocytes with Anti-Mouse CD4 FITC (Product # 11-0041-82) and 0.5 µg of Rat IgG2b kappa Isotype Control PE (Product # 12-4031-82) (left) or 0.5 µg of Anti-Mouse CD184 (CXCR4) PE (right). Total viable cells were used for analysis.

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## Flow Cytometry (28)

Journal of stem cell research and therapy

### Induced Pluripotent Stem Cells derived Muscle Progenitors Effectively Mitigate Muscular Dystrophy through Restoring the Dystrophin Distribution.

"Published figure using CD184 (CXCR4) monoclonal antibody (Product # 12-9991-82) in Flow Cytometry"

Authors: Cai WF,Huang W,Wang L,Wang JP,Zhang L,Ashraf M,Wu S,Wang Y

**Species**  
Mouse  
Not Applicable

**Dilution**  
Not Cited  
Not Cited

**Year**  
2019

Oncology letters

### Immunological effects of a low-dose cytarabine, aclarubicin and granulocyte-colony stimulating factor priming regimen on a mouse leukemia model.

Authors: Chen J,Yang N,Liu H,Yao H,Wang J,Yang Y,Zhang W

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2018

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

## Immunocytochemistry (1)

Stem cell research

### Efficient definitive endoderm induction from mouse embryonic stem cell adherent cultures: a rapid screening model for differentiation studies.

"12-9991 was used in Immunofluorescence to develop a protocol to efficiently induce definitive endoderm cells in mouse embryonic stem cell monolayer cultures."

Authors: Mfopou JK,Geeraerts M,Dejene R,Van Langenhoven S,Aberkane A,Van Grunsven LA,Bouwens L

**Species**  
Mouse

**Dilution**  
1:100

**Year**  
2014

## Immunofluorescence (1)

Stem cell research

### Efficient definitive endoderm induction from mouse embryonic stem cell adherent cultures: a rapid screening model for differentiation studies.

"12-9991 was used in Immunofluorescence to develop a protocol to efficiently induce definitive endoderm cells in mouse embryonic stem cell monolayer cultures."

Authors: Mfopou JK,Geeraerts M,Dejene R,Van Langenhoven S,Aberkane A,Van Grunsven LA,Bouwens L

**Species**  
Mouse

**Dilution**  
1:100

**Year**  
2014

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