

Technical Data Sheet

FITC Rat Anti-Mouse CD184

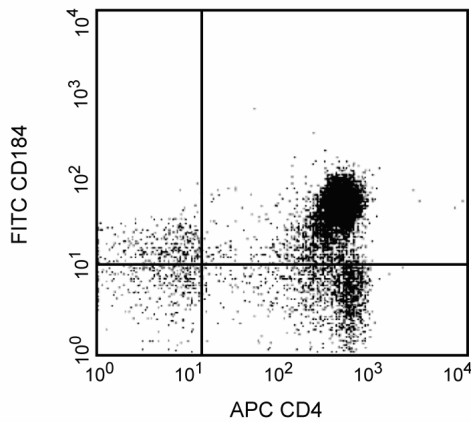
Product Information

Material Number:	551967
Alternate Name:	CXCR4, Fusin
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	2B11/CXCR4
Immunogen:	GST-NCXCR4 fusion protein
Isotype:	Rat IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The monoclonal antibody 2B11/CXCR4 reacts with the mouse CD184, which is also known as CXC chemokine receptor, CXCR4. CXCR4 (previously known as fusin, LESTR and HUMSTR), a seven-transmembrane, G-protein-coupled receptor, is the specific receptor for CXC chemokines, SDF-1/CXCL12. Mouse CXCR4 showed 91% homology at amino acid level with human CXCR4. The CXCR4 is widely expressed by hematopoietic and non hematopoietic cell types including PMN, monocytes, T cells, B cells, CD34+ progenitor cells, endothelial cells, neurons and astrocytes. The human CXCR4 is used by T-tropic HIV-1 as a co-receptor for viral entry. The mouse CXCR4 gene has been mapped to chromosome 1.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



**Detection of CXCR4 expression on BALB/c thymocytes by FITC-conjugated 2B11/CXCR4.** BALB/c thymocytes were stained with 1.0 µg/test of FITC-conjugated 2B11/CXCR4 and anti-mouse CD4-APC (Cat. No. 553051). The data reflects gating on lymphocytes, based on forward and side scattered light signals. The level of nonspecific staining was assessed by using FITC-conjugated rat IgG2b (Cat. No. 556923) as isotype control. The quadrant markers for the bivariate dot plots were set based on the isotype control.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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**Recommended Assay Procedure:**

For detecting low expression levels of chemokine receptors, a multi-step staining procedure is recommended. Our purified and biotinylated formats, Cat. No. 551852 and 551968, respectively, are useful for use in detecting low levels of expression using multi-step staining protocols.

**Suggested Companion Products**

Catalog Number	Name	Size	Clone
553051	APC Rat Anti-Mouse CD4	0.1 mg	RM4-5
556923	FITC Rat IgG2b, $\kappa$ Isotype Control	0.1 mg	A95-1

**Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmlingen/protocols](http://www.bdbiosciences.com/pharmlingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

**References**

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