

Technical Data Sheet

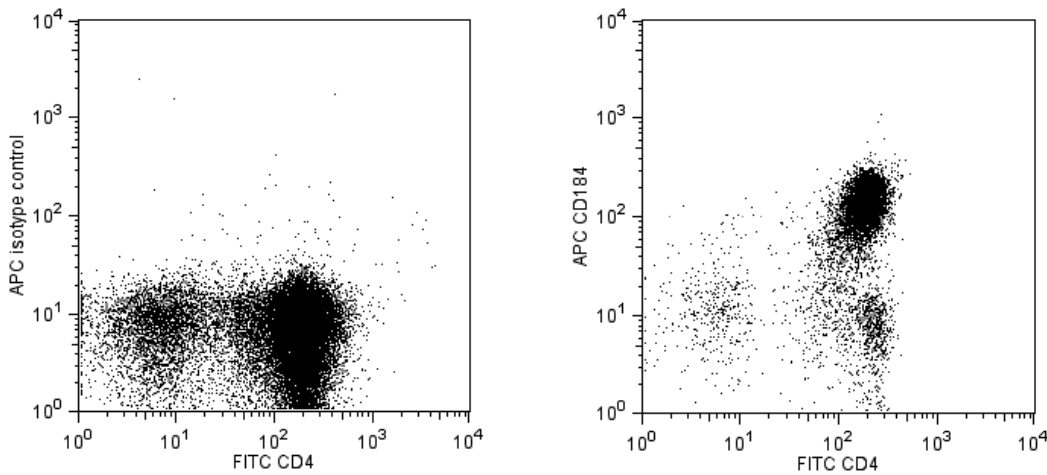
APC Rat anti-Mouse CD184

Product Information

Material Number:	558644
Alternate Name:	CXCR4, C-X-C chemokine receptor type 4; Fusin; LESTR; PB-CKR; Sdf1r
Size:	0.1 mg
Concentration:	0.2 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 2B11/CXCR4 monoclonal antibody specifically reacts with mouse CD184, which is also known as CXC chemokine receptor, CXCR4. CXCR4 (previously known as Fusin and LESTR), a seven-transmembrane, G-protein-coupled receptor, is the specific receptor for CXC chemokines, SDF-1/CXCL12. Mouse CXCR4 shows 91% homology at amino acid level with human CXCR4. CXCR4 is widely expressed by hematopoietic and non-hematopoietic cell types including neutrophils, monocytes, T cells, B cells, CD34-positive progenitor cells, endothelial cells, neurons and astrocytes. In the thymus CXCR4 is restricted to CD4+CD8+ cells, while in the spleen, predominant expression is found on B lymphocytes. 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.



**Expression of CD184 on mouse splenocytes.** Mouse splenocytes were simultaneously stained with APC Rat anti-Mouse CD184 (Cat. No. 558644; Right Panel) or APC Rat IgG2b, κ Isotype Control (Cat. No. 556924; Left Panel) and FITC Rat Anti-Mouse CD4 (Cat. No. 553047; Both Panels). Flow cytometry was performed on a BD FACSCalibur™ Flow Cytometry System.

Preparation and Storage

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

Application Notes

Application

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

Clone 2B11/CXCR4 has been reported to perform optimally when allowed to stain for 45 minutes. Please refer to <http://www.bdbiosciences.com/support/resources/> for additional resources and protocols.

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## Suggested Companion Products

Catalog Number	Name	Size	Clone
556924	APC Rat IgG2b, $\kappa$ Isotype Control	0.1 mg	A95-1
553047	FITC Rat Anti-Mouse CD4	0.5 mg	RM4-5
553031	FITC Rat Anti-Mouse CD8a	0.5 mg	53-6.7
554656	Stain Buffer (FBS)	500 ml	(none)

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
4. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
5. 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.
6. An isotype control should be used at the same concentration as the antibody of interest.

## References

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