

Technical Data Sheet

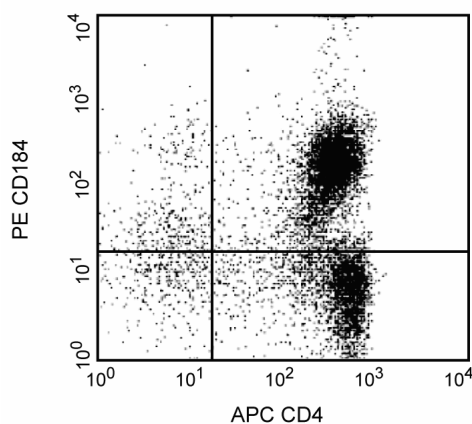
PE Rat Anti-Mouse CD184

Product Information

Material Number:	561734
Alternate Name:	CXCR4, C-X-C chemokine receptor type 4; Fusin; LESTR; PB-CKR; Sdf1r
Size:	25 µg
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 BALB/c thymocytes. BALB/c thymocytes were stained with 1.0 µg/test of PE Rat anti-Mouse CD184 and APC Rat anti-Mouse CD4 (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 PE Rat IgG2b, κ Isotype Control (Cat. No. 553989). The quadrant markers for the bivariate dot plots were set based on the isotype control.

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 with R-PE under optimum conditions, and unconjugated antibody and free PE 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.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553989	PE Rat IgG2b, κ Isotype Control	0.1 mg	A95-1
553051	APC Rat Anti-Mouse CD4	0.1 mg	RM4-5
554656	Stain Buffer (FBS)	500 ml	(none)

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
5. An isotype control should be used at the same concentration as the antibody of interest.

References

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