Technical Data Sheet

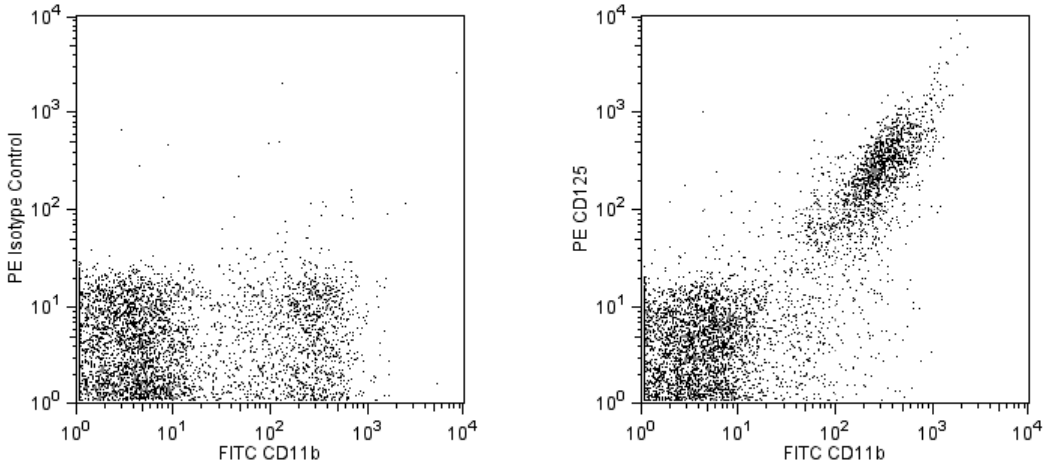
PE Rat anti-Mouse CD125

Product Information

Material Number:	**558488**
Alternate Name:	IL-5 Receptor α-subunit
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	T21
Immunogen:	Mouse T88-M
Isotype:	Rat IgG1, λ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The antibody clone T21 recognizes the mouse α-subunit (also known as CD125) of the IL-5 receptor. The IL-5 receptor is comprised of α- and β-subunits where the α-subunit is specific to the binding of IL-5 ligand and the β-subunit is common among the IL-3, IL5 and granulocyte/macrophage colony-stimulating factor (GM-CSF) receptors. Murine IL-5 belongs to the hematopoietic growth factor family of cytokines and is known to enhance several functions of murine B-cells, including immunoglobulin production, growth and differentiation. Upon binding, T21 inhibits IL-5 induced B-cell proliferation and Ig-secretion.



Flow cytometric analysis of PE-conjugated anti-mouse CD125 on mouse bone marrow cells. *Isolated murine bone marrow cells were stained with either PE anti-CD125 (clone T21, Cat. No. 558488, right panel) or a PE-conjugated rat IgG1 isotype control (Cat. No. 557078, left panel) and FITC anti-CD11b (clone M1/70, Cat. No. 553310). Flow cytometry was performed on a BD FACSCalibur™ System and the histograms were derived from the gated events based on light scattering characteristics of viable bone marrow cells.*

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

Neutralization Activity:

The T21 clone has been reported to inhibit IL-5 binding to it's receptor and to inhibit IL-5 induced B-cell proliferation and Ig-secretion.

Recommended Assay Procedure:

For flow cytometry of cell suspensions from peripheral lymphoid tissues, it is recommended that the cells be pre-incubated with Mouse BD Fc Block™ Purified anti-Mouse CD16/CD32 mAb, Clone 2.4G2 (Cat. No. 553141/553142).

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Suggested Companion Products

Catalog Number	Name	Size	Clone
557078	PE Rat IgG1, λ Isotype Control	0.1 mg	A110-1
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553310	FITC Rat Anti-Mouse CD11b	0.5 mg	M1/70
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

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

References

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Hitoshi Y, Yamaguchi N, Mita S, et al. Distribution of IL-5 receptor-positive cells. Expression of IL-5 receptor in Ly-1 (CD5)+ B cells.. *J Immunol.* 1990; 144(11):4218-4225. (Biology)

Wetzel, GD. Interleukin 5 regulation of peritoneal Ly-1 B lymphocyte proliferation, differentiation, and autoantibody secretion. *Eur J Immunol.* 1989; 19(9):1701-1707. (Biology)