Technical Data Sheet

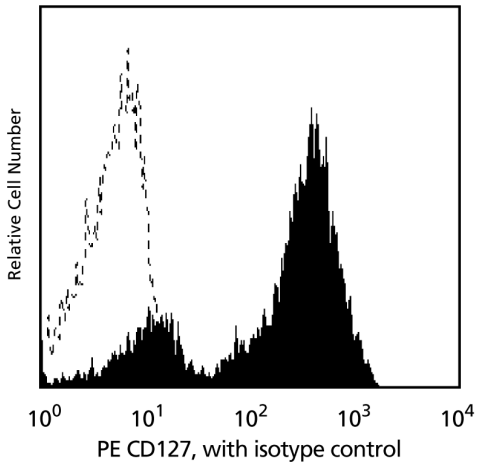
PE Mouse Anti-Human CD127

Product Information

Material Number:	**561028**
Alternate Name:	IL-7R; IL7R; IL7RA; IL-7Rα; IL-7R-alpha; Interleukin-7 Receptor alpha
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	HIL-7R-M21
Immunogen:	Human IL-7R Recombinant Protein
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Monoclonal antibody hIL-7R-M21 reacts with the 60-90 kDa glycoprotein, CD127. CD127 is also known as the IL-7 receptor alpha (IL-7Rα) subunit. The IL-7 receptor complex is a heterodimer composed of CD127 and the common gamma chain (γc, CD132), shared by other cytokine receptors (IL-2R, IL-4R, IL-9R, IL-15R, and IL-21R). CD127 is expressed on thymocytes, T- and B-cell progenitors, mature T cells, and some lymphoid and myeloid cells. In vitro experiments show the expression of CD127 is down-regulated following T cell activation. Studies indicate that the IL-7 Receptor plays an important role in the proliferation and differentiation of mature T cells. Recently, it has been shown that low surface expression of CD127, in combination with intermediate to high surface expression of CD25, the α chain of the IL-2 receptor complex, can distinguish between human regulatory and conventional CD4+ T cells in human adult and cord blood, lymph nodes and thymus.



Profile of CD127 (hIL-7R-M21) expression on peripheral blood lymphocytes analyzed by flow cytometry.

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

Suggested Companion Products

Catalog Number	Name	Size	Clone
554680	PE Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. This product may be covered by US Patent No. 5,543,320.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.268.5430	32.53.720.550	0120.8555.90	65.6861.0633	0800.771.7157

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

4. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Akashi K, Traver D, Kondo M, Weissman IL. Lymphoid development from hematopoietic stem cells. *Int J Hematol.* 1999; 69(4):217-226. (Biology)

Appasamy PM. Biological and clinical implications of interleukin-7 and lymphopoiesis. *Cytokines Cell Mol Ther.* 1999; 5(1):25-39. (Biology)

Fitzgerald KA, O Neill LAJ, Geraring AJH. *The Cytokine Facts Book.* 2001:75. (Biology)

Goodwin RG, Friend D, Ziegler SF et al. Cloning of the human and murine interleukin-7 receptors: demonstration of a soluble form and homology to a new receptor superfamily. *Cell.* 1990; 60(6):941-951. (Biology)

Hofmeister R, Khaled AR, Benbernou N, Rajnavolgyi E, Muegge K, Durum SK. Interleukin-7: physiological roles and mechanisms of action. *Cytokine Growth Factor Rev.* 1999; 10(1):41-60. (Biology)