Technical Data Sheet

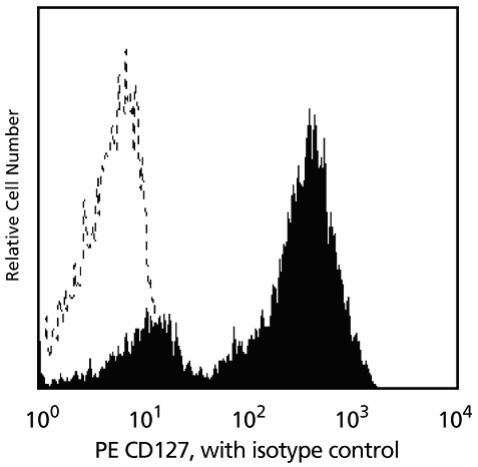
PE Mouse Anti-Human CD127

Product Information

Material Number:	**557938**
Alternate Name:	Interleukin-7 receptor alpha
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	HIL-7R-M21
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). The receptor is a heterodimer composed of the CD127 and the common gamma chain, shared by other cytokine receptors (IL-2R, IL-4R, IL-9R, and IL-15R). 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 suface expression of CD25, the α chain of the IL-2 receptor, 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

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.
Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

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

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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. This product may be covered by US Patent No. 5,543,320.

References

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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)