

# CD127 Monoclonal Antibody (eBioRDR5), FITC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioRDR5
Conjugate	FITC
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1907342

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	32 Publications

## Product Specific Information

Description: The eBioRDR5 monoclonal antibody reacts with human CD127 (Interleukin-7 Receptor alpha). CD127 complexes with CD132, also known as the common gamma chain (gamma c), to form the multi-functional IL-7 receptor (IL-7R). CD127 is a type I glycoprotein with a molecular weight of 75-80 kDa and is expressed by immature B cells through the early pre-B stage, by thymocytes during several stages of their development, and on most mature T cells, with transient down-regulation upon activation. Binding of IL-7 results in signal transduction which occurs through several tyrosine kinase pathways including the Jak /STAT pathway. IL-7 is indispensable for the development of lymphocytes, and the control of homeostatic proliferation of T-cells in the periphery. In addition, IL-7R signaling is known to be involved in the regulation of T cell receptor (TCR) locus rearrangement in gamma delta T cells.

Interestingly, recently it has been demonstrated that CD127 expression is down-regulated on CD4+CD25+ regulatory T cells (T regs). While the co-expression of CD4 and CD25 has become widely used as an indicator of T regs, this method of identification may also include cells without suppressive activity. It has clearly been shown that CD4+CD25+ cells that have down-regulated the expression of CD127 are significantly more highly-enriched for the regulatory T population, as defined by expression of the T reg-specific transcription factor Foxp3 and the suppressive activity of these cells, in vitro.

Binding of the eBioRDR5 monoclonal antibody to PBMCs is blocked by pre-incubation of the cells with recombinant human IL-7 (cat. 14-8079).

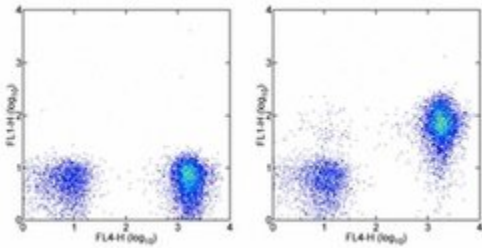
Applications Reported: This eBioRDR5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioRDR5 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5  $\mu$ L (0.125  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.

Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser.

Filtration: 0.2  $\mu$ m post-manufacturing filtered.

### Product Images For CD127 Monoclonal Antibody (eBioRDR5), FITC, eBioscience™



#### CD127 Antibody (11-1278-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD3 APC (Product # 17-0038-42) and Mouse IgG1 K Isotype Control FITC (Product # 11-4714-42) (left) or Anti-Human CD127 FITC (right). Cells in the lymphocyte gate were used for analysis.

## 33 References

### Immunohistochemistry (Frozen) (1)

Journal of immunology (Baltimore, Md. : 1950)

#### Loss of IL-7 receptor alpha on CD4+ T cells defines terminally differentiated B cell-helping effector T cells in a B cell-rich lymphoid tissue.

Authors: Lim HW, Kim CH

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2007

### Flow Cytometry (32)

STAR protocols

#### TARGET-Seq: A Protocol for High-Sensitivity Single-Cell Mutational Analysis and Parallel RNA Sequencing.

"11-1278 was used in Flow cytometry/Cell sorting to present a detailed step-by-step protocol for TARGET-seq, including troubleshooting tips, approaches for automation, and methods for high-throughput multiplexing of libraries."

Authors: Rodriguez-Meira A, O'Sullivan J, Rahman H, Mead AJ

**Species**  
Human

**Dilution**  
1:30

**Year**  
2020

Nature immunology

#### Distinct microbial and immune niches of the human colon.

"11-1278 was used in Flow cytometry/Cell sorting to assess microbiota and single immune cells across the healthy, adult human colon, with paired characterization of immune cells in the mesenteric lymph nodes, to delineate colonic immune niches at steady state."

Authors: James KR, Gomes T, Elmentaite R, Kumar N, Gulliver EL, King HW, Stares MD, Bareham BR, Ferdinand JR, Petrova VN, Polaski K, Forster SC, Jarvis LB, Suchanek O, Howlett S, James LK, Jones JL, Meyer KB, Clatworthy MR, Saeb-Parsy K, Lawley TD, Teichmann SA

**Species**  
Human

**Dilution**  
1:200

**Year**  
2020

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