

CD127 Monoclonal Antibody (eBioRDR5), eFluor 450, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioRDR5
Conjugate	eFluor® 450
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_1963566

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	24 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.

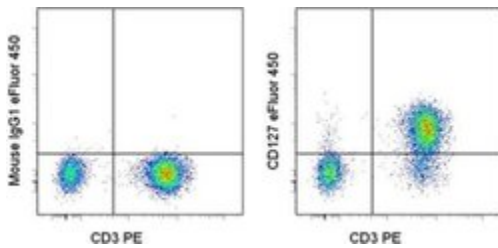
Applications Tested: This eBioRDR5 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 μ L (0.125 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L.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

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

Product Images For CD127 Monoclonal Antibody (eBioRDR5), eFluor 450, eBioscience™



CD127 Antibody (48-1278-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD3 PE (Product # 12-0038-42) and Mouse IgG1 K Isotype Control eFluor® 450 (Product # 48-4714-82) (left) or Anti-Human CD127 eFluor® 450 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

26 References

Immunohistochemistry (1)

Frontiers in immunology

Differentially Expressed Potassium Channels Are Associated with Function of Human Effector Memory CD8⁺ T Cells.

"Published figure using CD127 monoclonal antibody (Product # 48-1278-42) in Immunohistochemistry"

Authors: Sim JH, Kim KS, Park H, Kim KJ, Lin H, Kim TJ, Shin HM, Kim G, Lee DS, Park CW, Lee DH, Kang I, Kim SJ, Cho CH, Doh J, Kim HR

Species
Not Applicable

Dilution
Not Cited

Year
2019

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 (24)

JCI insight

Systematic testing and specificity mapping of alloantigen-specific chimeric antigen receptors in regulatory T cells.

"48-1278 was used in Flow cytometry/Cell sorting to characterise and test alloantigen-specific chimeric antigen receptors in regulatory T cells."

Authors: Dawson NA, Lamarche C, Hoeppli RE, Bergqvist P, Fung VC, McIver E, Huang Q, Gillies J, Speck M, Orban PC, Bush JW, Mojibian M, Levings MK

Species
Human

Dilution
Not Cited

Year
2019

Cell reports

Activation of miR-21-Regulated Pathways in Immune Aging Selects against Signatures Characteristic of Memory T Cells.

"Published figure using CD127 monoclonal antibody (Product # 48-1278-42) in Flow Cytometry"

Authors: Kim C, Hu B, Jadhav RR, Jin J, Zhang H, Cavanagh MM, Akondy RS, Ahmed R, Weyand CM, Goronzy JJ

Species
Not Applicable

Dilution
Not Cited

Year
2018

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More applications with references on thermofisher.com

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