

CD127 Monoclonal Antibody (eBioRDR5), APC-eFluor 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC-eFluor 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioRDR5
Conjugate	APC-eFluor® 780
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_1548674

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	20 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 μL (0.125 μg) per test. A test is defined as the amount (μg) of antibody that will stain a cell sample in a final volume of 100 μL . Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

APC-eFluor 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

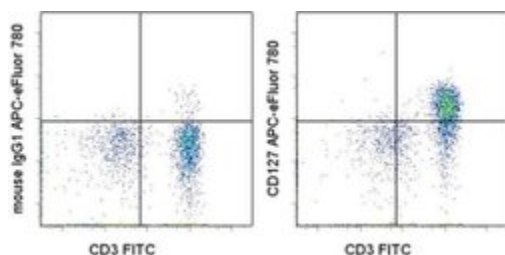
Light sensitivity: This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μL cell sample + 100 μL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 633-647 nm; **Emission:** 780 nm; **Laser:** Red Laser.

Filtration: 0.2 μm post-manufacturing filtered.

Product Images For CD127 Monoclonal Antibody (eBioRDR5), APC-eFluor 780, eBioscience™



CD127 Antibody (47-1278-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD3 FITC (Product # 11-0038-42) and Mouse IgG1 kappa Isotype Control APC-eFluor® 780 (Product # 47-4714-82) (left) or Anti-Human CD127 APC-eFluor® 780 (right). Cells in the lymphocyte gate were used for analysis.

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

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 (20)

Nature medicine

A controlled human Schistosoma mansoni infection model to advance novel drugs, vaccines and diagnostics.

"47-1278 was used in Flow cytometry/Cell sorting to performed a dose-escalating clinical safety trial in 17 volunteers with male Schistosoma mansoni cercariae, which do not produce eggs (clinicaltrials.gov NCT02755324), at the Leiden University Medical Center, the Netherlands."

Authors: Langenberg MCC, Hoogerwerf MA, Koopman JPR, Janse JJ, Kos-van Oosterhoud J, Feijt C, Jochems SP, de Dood CJ, van Schuijlenburg R, Ozir-Fazalikhani A, Manurung MD, Sartono E, van der Beek MT, Winkel BMF, Verbeek-Menken PH, Stam KA, van Leeuwen FWB, Meij P, van Diepen A, van Lieshout L, van Dam GJ, Corstjens PLAM, Hokke CH, Yazdanbakhsh M, Visser LG, Roestenberg M

Species
Human

Dilution
Not Cited

Year
2020

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 # 47-1278-42) 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

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

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