

CD127 Monoclonal Antibody (eBioRDR5), PE-Cyanine5, 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), PE-Cyanine5, eBioscience
Class	Monoclonal
Type	Antibody
Clone	eBioRDR5
Conjugate	PE-Cyanine5
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_2043801

Applications	Tested Dilution	Publications
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.

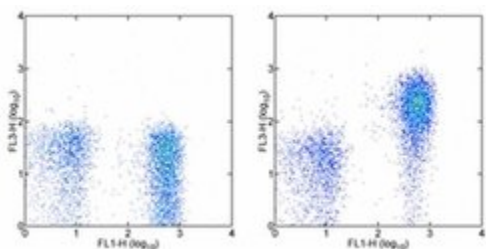
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L cell sample + 100 μ L 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: 488-561 nm; **Emission:** 667 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

Product Images For CD127 Monoclonal Antibody (eBioRDR5), PE-Cyanine5, eBioscience



CD127 Antibody (15-1278-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD3 FITC (Product # 11-0037-42) and Mouse IgG1 K Isotype Control PE-Cyanine5 (Product # 15-4714-81) (left) or Anti-Human CD127 PE-Cyanine5 (right). Cells in the lymphocyte gate were used for analysis.

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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)

Breast cancer research : BCR

A different immunologic profile characterizes patients with HER-2-overexpressing and HER-2-negative locally advanced breast cancer: implications for immune-based therapies.

"15-1278 was used in Flow cytometry/Cell sorting to demonstrate that patients with HER2-overexpressing locally advanced breast cancer show more limited tumour-related immune suppression than HER2- patients."

Authors: Muraro E, Martorelli D, Turchet E, Miolo G, Scalone S, Comaro E, Talamini R, Mastorci K, Lombardi D, Perin T, Carbone A, Veronesi A, Crivellari D, Dolcetti R

Species
Human

Dilution
Not Cited

Year
2012

Journal of translational medicine

Improved Natural Killer cell activity and retained anti-tumor CD8(+) T cell responses contribute to the induction of a pathological complete response in HER2-positive breast cancer patients undergoing neoadjuvant chemotherapy.

"15-1278 was used in Flow cytometry/Cell sorting to indicate that maintenance of functional T cell responses against selected antigens and improvement of NK cell proficiency during NC are probably critical requirements for pCR induction."

Authors: Muraro E, Comaro E, Talamini R, Turchet E, Miolo G, Scalone S, Militello L, Lombardi D, Spazzapan S, Perin T, Massarut S, Crivellari D, Dolcetti R, Martorelli D

Species
Human

Dilution
Not Cited

Year
2015

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

More applications with references on thermofisher.com

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