

# CD127 Monoclonal Antibody (eBioRDR5), PE-Cyanine7, 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), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioRDR5
Conjugate	PE-Cyanine7
Excitation/Emission Max	569/780 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1659672

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	34 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 (Product # 14-1079-80).

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 (0.5 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<sup>5</sup> to 10<sup>8</sup> cells /test.

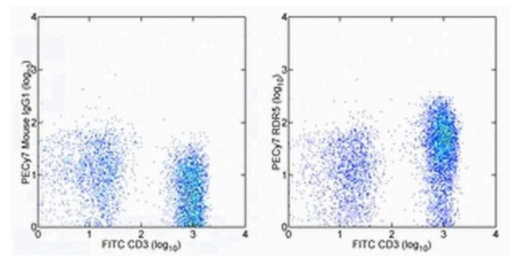
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD127 Monoclonal Antibody (eBioRDR5), PE-Cyanine7, eBioscience™



**CD127 Antibody (25-1278-42) 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-Cyanine7 (Product # 25-4714-80) (left) or Anti-Human CD127 PE-Cyanine7 (right). Cells in the lymphocyte gate were used for analysis.

Immunohistochemistry (Frozen) (1)

<p>Journal of immunology (Baltimore, Md. : 1950)</p> <p><b>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.</b></p> <p>Authors: Lim HW,Kim CH</p>	<p>Year 2007</p>
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Flow Cytometry (34)

<p>Nature communications</p> <p><b>T cell responses at diagnosis of amyotrophic lateral sclerosis predict disease progression.</b></p> <p>"25-1278-42 was used in Flow cytometry/Cell sorting to show, by flow cytometric analysis of blood and cerebrospinal fluid (CSF) samples of a cohort of 89 newly diagnosed ALS patients in Stockholm, Sweden, that T cell phenotypes at the time of diagnosis are good predictors of disease outcome."</p> <p>Authors: Yazdani S,Seitz C,Cui C,Lovik A,Pan L,Piehl F,Pawitan Y,Kläppe U,Press R,Samuelsson K,Yin L,Vu TN,Joly AL,Westerberg LS,Evertsson B,Ingre C,Andersson J,Fang F</p>	<p>Year 2022</p> <p>Species Human</p>
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<p>Cell reports</p> <p><b>Organoids capture tissue-specific innate lymphoid cell development in mice and humans.</b></p> <p>"25-1278-42 was used in Flow Cytometry to demonstrate that human epithelial cells recapitulate maturation of ILC from a stringent systemic human ILCP population, but only when the organoid-associated stromal cells are depleted."</p> <p>Authors: Jowett GM,Read E,Roberts LB,Coman D,Vilà González M,Zabinski T,Niazi U,Reis R,Trieu TJ,Danovi D,Gentleman E,Vallier L,Curtis MA,Lord GM,Neves JF</p>	<p>Year 2022</p> <p>Species Mouse</p>
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