

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 10^5 to 10^8 cells /test.

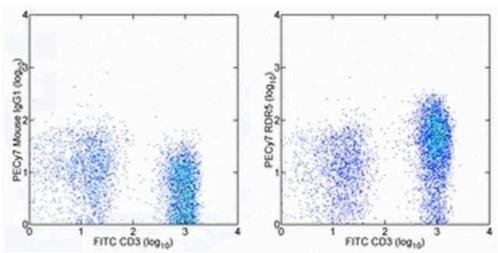
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (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)

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

Year
2007

Flow Cytometry (34)

Nature communications

T cell responses at diagnosis of amyotrophic lateral sclerosis predict disease progression.

"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."

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

Year
2022

Species
Human

Cell reports

Organoids capture tissue-specific innate lymphoid cell development in mice and humans.

"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."

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

Year
2022

Species
Mouse

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

More applications with references on thermofisher.com

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