

CD4 Monoclonal Antibody (RPA-T4), PE, eBioscience™

Product Details

Size	25 µg
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, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_657745

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	46 Publications
Neutralization (Neu)	-	1 Publication
Functional Assay (FN)	-	1 Publication

Product Specific Information

Description: The RPA-T4 monoclonal antibody reacts with human CD4, a 59 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells (T-helper cells) and in low levels on monocytes. CD4 is a receptor for the human immunodeficiency virus (HIV). RPA-T4 blocks HIV binding and mixed lymphocyte reaction. The RPA-T4 antibody recognizes a different epitope than the OKT4 monoclonal antibody, and these antibodies do not cross-block binding to each other's respective epitopes.

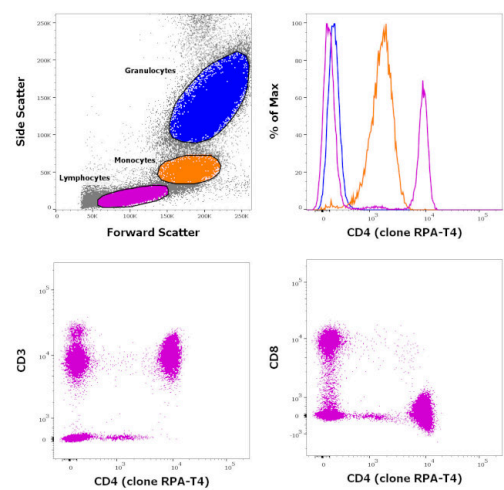
Applications Reported: The RPA-T4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: The FITC conjugated RPA-T4 has been tested by flow cytometric analysis and can be used at less than or equal to 1 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

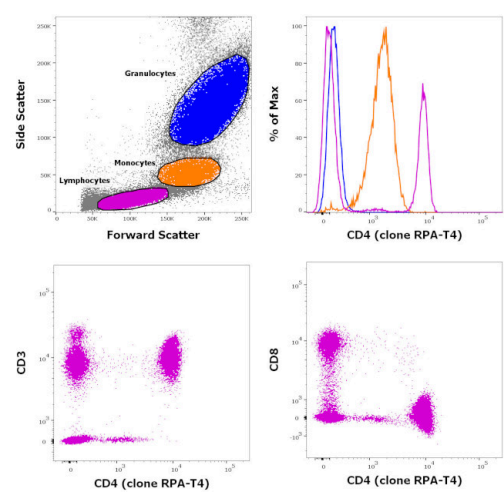
Excitation: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (RPA-T4), PE, eBioscience™



CD4 Antibody (12-0049-80)
Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue, CD3 APC, CD8 PerCP and CD4 PE. As expected based on known relative expression patterns, CD4 clone RPA-T4 stains a subset of lymphocytes (pink) and monocytes (orange), but not granulocytes (blue). {RE}



CD4 Antibody (12-0049-80) in Flow
Staining of human peripheral blood mononuclear cells with CD45 Pacific Blue, CD3 APC, CD8 PerCP and CD4 PE. As expected based on known relative expression patterns, CD4 clone RPA-T4 stains a subset of lymphocytes (pink) and monocytes (orange), but not granulocytes (blue).

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48 References

Flow Cytometry (46)

JCI insight	Year 2023
Rapamycin improves Graves' orbitopathy by suppressing CD4+ cytotoxic T lymphocytes.	
"Published figure using CD4 monoclonal antibody (Product # 12-0049-80) in Flow Cytometry"	
Authors: Zhang M,Chong KK,Chen ZY,Guo H,Liu YF,Kang YY,Li YJ,Shi TT,Lai KK,He MQ,Ye K,Kahaly GJ,Shi BY,Wang Y	
Frontiers in immunology	Year 2023
Single-cell RNA sequencing reveals the molecular features of peripheral blood immune cells in children, adults and centenarians.	
"Published figure using CD4 monoclonal antibody (Product # 12-0049-80) in Flow Cytometry"	
Authors: Zhong J,Ding R,Jiang H,Li L,Wan J,Feng X,Chen M,Peng L,Li X,Lin J,Yang H,Wang M,Li Q,Chen Q	

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

Neutralization (1)

<p>Retrovirology</p> <p>Gelsolin activity controls efficient early HIV-1 infection.</p> <p>"12-0049 was used in Neutralization experiments to propose that gelsolin can limit HIV-1 infection at a pre-fusion step."</p> <p>Authors: García-Expósito L,Ziglio S,Barroso-González J,de Armas-Rillo L,Valera MS,Zipeto D,Machado JD,Valenzuela-Fernández A</p>	<p>Year 2013</p> <p>Species Human</p>
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Functional Assay (1)

<p>PloS one</p> <p>The lantibiotic peptide labyrintheptin A1 demonstrates broad anti-HIV and anti-HSV activity with potential for microbicidal applications.</p> <p>"12-0049 was used in Functional assays to evaluate the broad-spectrum activity of lantibiotic peptide labyrintheptin A1 against HIV and HSV in vitro, its mechanism of action and potential microbicidal applications."</p> <p>Authors: Férrir G,Petrova MI,Andrej G,Huskens D,Hoorelbeke B,Snoeck R,Vanderleyden J,Balzarini J,Bartoschek S,Brönstrup M,Süssmuth RD,Schols D</p>	<p>Year 2014</p> <p>Species Human</p>
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