

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

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Mouse, Human
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	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_1582249

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	66 Publications

Product Specific Information

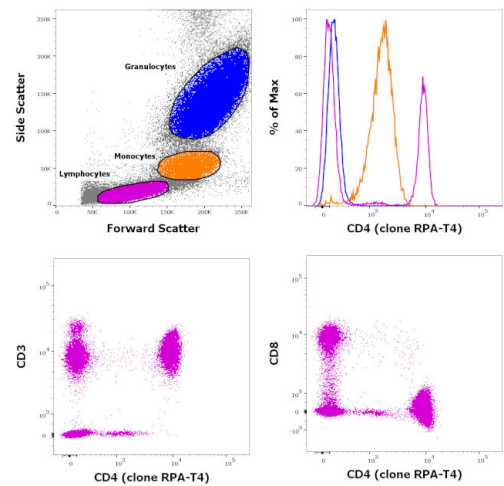
Description: The RPA-T4 monoclonal antibody reacts with human CD4, a 59 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells (T-helper cells) and in low levels on monocytes. CD4 is a receptor for the human immunodeficiency virus (HIV). RPA-T4 blocks HIV binding 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: Has been pre-titrated and tested by flow cytometric analysis and 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

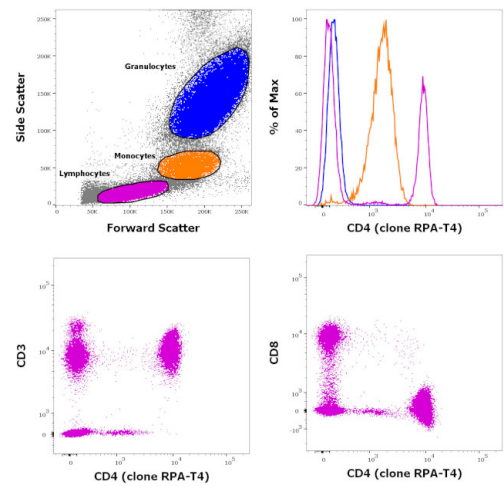
Excitation: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.



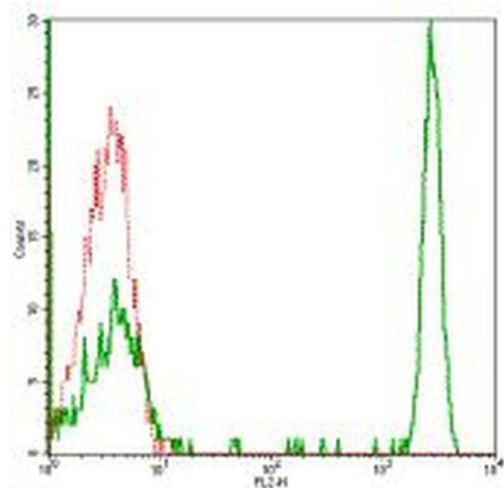
CD4 Antibody (12-0049-42)

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 (12-0049-42) 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).



CD4 Antibody (12-0049-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 kappa Isotype Control PE (Product # 12-4714-81) (red histogram) or Anti-Human CD4 PE (green histogram).

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Flow Cytometry (66)

Redox biology IL-4 activates ULK1/Atg9a/Rab9 in asthma, NLRP3 inflammasomes, and Golgi fragmentation by increasing autophagy flux and mitochondrial oxidative stress. "Published figure using CD4 monoclonal antibody (Product # 12-0049-42) in Flow Cytometry" Authors: Xu C,Song Y,Liu W,Liu R,Bai Q,Li L,Wang C,Yan G	Year 2024
Biomedical reports Myeloidderived suppressor cell accumulation induces Treg expansion and modulates lung malignancy progression. "Published figure using CD4 monoclonal antibody (Product # 12-0049-42) in Flow Cytometry" Authors: Wan Y,Mu X,Zhao J,Li L,Xu W,Zhang M	Year 2024

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