

CD4 Monoclonal Antibody (RPA-T4), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Human
Published Species	Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467077

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	Assay-Dependent	6 Publications
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	1 µg/test	53 Publications
Neutralization (Neu)	Assay-Dependent	3 Publications
Functional Assay (FN)	Assay-Dependent	3 Publications
Inhibition Assays (IA)	-	1 Publication
Fluorescence Resonance Energy Transfer (FRET)	-	1 Publication
Miscellaneous PubMed (Misc)	-	2 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, and immunohistochemical staining. RPA-T4 has also been reported for use in blocking of CD4 activity in in vitro functional assays (Please use Functional Grade purified RPA-T4, cat. 16-0049, in functional assays.).

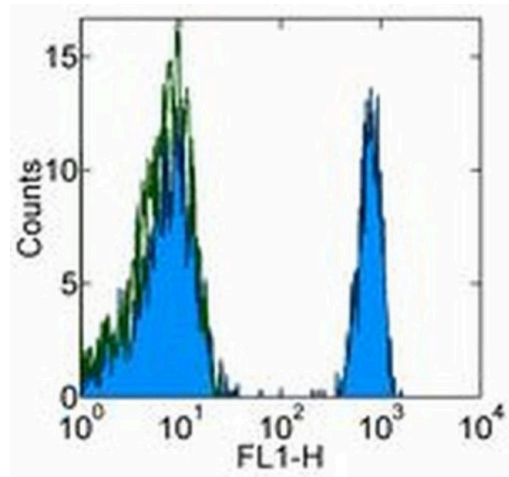
Applications Tested: The RPA-T4 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number 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.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

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



CD4 Antibody (14-0049-82) in Flow
Staining of normal human peripheral blood cells with 0.5 µg of Mouse IgG1 kappa Isotype Control Purified (Product # 14-4714-82) (open histogram) or 0.5 µg of Anti-Human CD4 Purified (filled histogram) followed by Anti-Mouse IgG FITC (Product # 11-4011-85). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

Immunohistochemistry (6)

<p>Nature communications</p> <p>Increased levels of endogenous retroviruses trigger fibroinflammation and play a role in kidney disease development.</p> <p>"14-0049-82 was used in Immunohistochemistry-immunofluorescence to indicate an important role of epigenetic derepression-induced ERV activation triggering renal fibroinflammation."</p> <p>Authors: Dhillon P,Mulholland KA,Hu H,Park J,Sheng X,Abedini A,Liu H,Vassalotti A,Wu J,Susztak K</p>	<p>Year 2023</p> <p>Species Mouse</p> <p>Dilution 1:100</p>
<p>Cells</p> <p>Induced Human Regulatory T Cells Express the Glucagon-like Peptide-1 Receptor.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 14-0049-82) in Immunohistochemistry"</p> <p>Authors: Rode AKO,Buus TB,Mraz V,Al-Jaberi FAH,Lopez DV,Ford SL,Hennen S,Eliassen IP,Klewe IV,Gharehdaghi L,Dragan A,Rosenkilde MM,Woetmann A,Skov L,Ødum N,Bonefeld CM,Kongsbak-Wismann M,Geisler C</p>	<p>Year 2022</p>

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

Immunocytochemistry (4)

<p>Proceedings of the National Academy of Sciences of the United States of America</p> <p>Remarkably low affinity of CD4/peptide-major histocompatibility complex class II protein interactions.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 14-0049-82) in Immunofluorescence"</p> <p>Authors: Jönsson P, Southcombe JH, Santos AM, Huo J, Fernandes RA, McColl J, Lever M, Evans EJ, Hudson A, Chang VT, Hanke T, Godkin A, Dunne PD, Horrocks MH, Palayret M, Screaton GR, Petersen J, Rossjohn J, Fugger L, Dushek O, Xu XN, Davis SJ, Klenerman D</p>	<p>Year 2016</p>
<p>eLife</p> <p>The HIV-1 envelope protein gp120 is captured and displayed for B cell recognition by SIGN-R1(+) lymph node macrophages.</p> <p>"14-0049 was used in Immunohistochemistry to reveal a specialised lymph node antigen delivery system capable of delivering gp120 and other pathogen-derived glycoproteins to B cells."</p> <p>Authors: Park C, Arthos J, Cicala C, Kehrl JH</p>	<p>Year 2015</p> <p>Species Human</p>

[View more ICC/IF references on thermofisher.com](#)

More applications with references on thermofisher.com

- Flow (53)
- Neu (3)
- FN (3)
- IA (1)
- FRET (1)
- Misc (2)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.