

PE/Cyanine7 anti-human CD4 Antibody

Catalog# / Size	357409 / 25 tests 357410 / 100 tests
Clone	A161A1
Regulatory Status	RUO
Other Names	T4/Leu-3
Isotype	Rat IgG2b, κ
Description	CD4, also known as T4/Leu-3, is a 55 kD single-chain type I transmembrane glycoprotein and member of the immunoglobulin superfamily. It is expressed on most thymocytes, helper T cells, type II NKT cells, and monocytes/macrophages. CD4 is part of the TCR/CD3 complex, binds to $\beta 2$ domain from the MHC class II molecule, and participates in TCR signal transduction. CD4 is the receptor of IL-16 and is a coreceptor for the human immunodeficiency virus (HIV) and human herpes virus 7 (HHV-7).

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Human CD4 T cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions.

Product Citations

1. Ahmed R *et al.* 2019. Cell. 177(6):1583-1599. [PubMed](#)
2. Łyszkiewicz M, *et al.* 2020. Nat Commun. 11:1031. [PubMed](#)
3. Yang W, *et al.* 2020. Nat Commun. 3.553472222. [PubMed](#)
4. Wang K, *et al.* 2020. Signal Transduct Target Ther. 0.404861111. [PubMed](#)
5. Corrado M, *et al.* 2020. Cell Metab. 32:981. [PubMed](#)
6. Park JA, *et al.* 2020. J Hematol Oncol. 0.661111111. [PubMed](#)
7. Faust HJ, *et al.* 2020. J Clin Invest. 130:5493. [PubMed](#)
8. Park JA, *et al.* 2021. Journal for ImmunoTherapy of Cancer. 9(5):. [PubMed](#)
9. Le J, *et al.* 2020. Immunity. 52(6):1105-1118.e9. [PubMed](#)
10. Hearnden R, *et al.* 2021. STAR Protocols. 2(2):100422. [PubMed](#)

RRID	AB_2565661 (BioLegend Cat. No. 357409) AB_2565662 (BioLegend Cat. No. 357410)
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Antigen Details

Structure	55 kD, type I transmembrane glycoprotein, member of the Ig superfamily
Distribution	Helper T cells, subset of thymocytes, monocytes/macrophages, type II NKT cells
Interaction	Part of the TCR/CD3 complex
Ligand/Receptor	β 2 domain from the MHC class II
Cell Type	T cells, Monocytes, Macrophages, NKT cells
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none">1. Zhu J, <i>et al.</i> 2010. <i>Annu Rev. Immunol.</i> 28:445.2. Vignali DA. 2010. <i>J. Immunol.</i> 184:5933.3. Zhou L, <i>et al.</i> 2009. <i>Immunity</i> 30:646.4. Singer A, <i>et al.</i> 2008. <i>Nat. Rev. Immunol.</i> 8:788.5. Zhu J and Paul WE. 2008. <i>Blood</i> 112:1557.
Gene ID	920

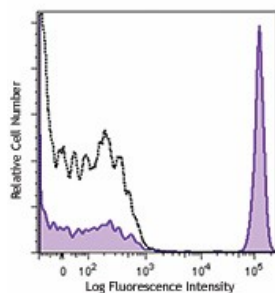
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD4, PE anti-human CD4, FITC anti-human CD4, PerCP/Cyanine5.5 anti-human CD4, APC anti-human CD4, PE/Cyanine7 anti-human CD4, PE/Dazzle™ 594 anti-human CD4, APC/Cyanine7 anti-human CD4, Alexa Fluor® 700 anti-human CD4, Brilliant Violet 510™ anti-human CD4, APC/Fire™ 750 anti-human CD4, Alexa Fluor® 647 anti-human CD4, Biotin anti-human CD4, Brilliant Violet 421™ anti-human CD4, PE/Cyanine5 anti-human CD4

Product Data



Human peripheral blood lymphocytes were stained with CD4 (clone A161A1) PE/Cyanine7 (filled histogram) or rat IgG2b, κ PE/Cyanine7 isotype control (open histogram).

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