

Alexa Fluor[®] 700 anti-human CD4 Antibody

Catalog# / Size	344621 / 25 tests 344622 / 100 tests
Clone	SK3
Regulatory Status	RUO
Other Names	T4, Leu3a
Isotype	Mouse IgG1, κ
Description	CD4, also known as T4, is a 55 kD single-chain type I transmembrane glycoprotein expressed on most thymocytes, a subset of T cells, and monocytes/macrophages. CD4, a member of the Ig superfamily, recognizes antigens associated with MHC class II molecules and participates in cell-cell interactions, thymic differentiation, and signal transduction. CD4 acts as a primary receptor for HIV, binding to HIV gp120. CD4 has also been shown to interact with IL-16.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
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 Alexa Fluor [®] 700 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	<p>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 μl per million cells in 100 μl staining volume or 5 μl per 100 μl of whole blood.</p> <p>* Alexa Fluor[®] 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor[®] 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Red Laser (633 nm)
Application References	<ol style="list-style-type: none">1. Evans RL, <i>et al.</i> 1981. <i>Immunol.</i> 78:5442. Arno A <i>et al.</i> 1999. <i>J. Infect. Dis.</i> 180:563. Muech M, <i>et al.</i> 1997. <i>Blood</i> 89:13644. Wang L, <i>et al.</i> 2012. <i>Cytometry A.</i> 81:567. PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none">1. Martin AR, <i>et al.</i> 2020. <i>EBioMedicine.</i> 62:103102. PubMed2. He W <i>et al.</i> 2018. <i>Immunity.</i> 49(6):1175-1190. PubMed3. Cohen CA, <i>et al.</i> 2021. <i>Nat Commun.</i> 12:4678. PubMed4. Litchfield K, <i>et al.</i> 2021. <i>Cell.</i> 184(3):596-614.e14. PubMed5. Mudd PA, <i>et al.</i> 2022. <i>Cell.</i> 185:603. PubMed6. Turner JS, <i>et al.</i> 2020. <i>Nature.</i> 586:127. PubMed7. Salvany-Celades M <i>et al.</i> 2019. <i>Cell Rep.</i> 27(9):2537-2547. PubMed

8. Shuwa HA, *et al.* 2021. *Med.* 2(6):720-735.e4. [PubMed](#)
9. Martin GE, *et al.* 2018. *Front Immunol.* 1.019444444. [PubMed](#)

RRID AB_2563149 (BioLegend Cat. No. 344621)
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Antigen Details

Structure	Ig superfamily, type I transmembrane glycoprotein, 55 kD
Distribution	T cell subset, majority of thymocytes, monocytes/macrophages
Function	MHC class II co-receptor, lymphocyte adhesion, thymic differentiation, HIV receptor
Ligand/Receptor	MHC class II molecules, HIV gp120, IL-16
Cell Type	Macrophages, Monocytes, T cells, Thymocytes, Tregs
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Center D <i>et al.</i> 1996. <i>Immunol. Today</i> 17:476. 2. Gaubin M <i>et al.</i> 1996. <i>Eur. J. Clin. Chem. Clin. Biochem.</i> 34:723.
Gene ID	920

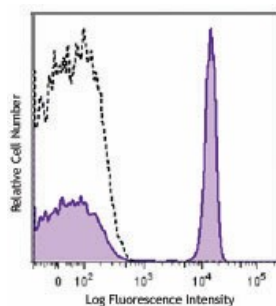
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PerCP anti-human CD4, Purified anti-human CD4, FITC anti-human CD4, PE anti-human CD4, PerCP/Cyanine5.5 anti-human CD4, Biotin anti-human CD4, PE/Cyanine7 anti-human CD4, APC anti-human CD4, APC/Cyanine7 anti-human CD4, Alexa Fluor® 488 anti-human CD4, Pacific Blue™ anti-human CD4, Alexa Fluor® 700 anti-human CD4, Purified anti-human CD4 (Maxpar® Ready), Brilliant Violet 421™ anti-human CD4, Brilliant Violet 510™ anti-human CD4, Alexa Fluor® 647 anti-human CD4, APC/Fire™ 750 anti-human CD4, PE/Dazzle™ 594 anti-human CD4, Brilliant Violet 785™ anti-human CD4, Brilliant Violet 750™ anti-human CD4, Brilliant Violet 605™ anti-human CD4, Brilliant Violet 711™ anti-human CD4, TotalSeq™-A0045 anti-human CD4, TotalSeq™-C0045 anti-human CD4, PE/Cyanine5 anti-human CD4, Spark Blue™ 550 anti-human CD4, Spark NIR™ 685 anti-human CD4, KIRAVIA Blue 520™ anti-human CD4, APC/Fire™ 810 anti-human CD4, PE/Fire™ 640 anti-human CD4, PE/Fire™ 700 anti-human CD4, Spark Violet™ 538 anti-human CD4 Antibody, Spark YG™ 581 anti-human CD4, Alexa Fluor® 660 anti-human CD4, Spark YG™ 593 anti-human CD4, PE/Fire™ 810 anti-human CD4 Antibody, APC/Fire™ 750 anti-human CD4, Spark Blue™ 574 anti-human CD4, GMP APC anti-human CD4, TotalSeq™-B0045 anti-human CD4 Antibody, Spark Violet™ 423 anti-human CD4 Antibody, GMP Pacific Blue™ anti-human CD4, Spark UV™ 387 anti-human CD4, GMP PE anti-human CD4, GMP FITC anti-human CD4, Spark Red™ 718 anti-human CD4, GMP PerCP anti-human CD4, GMP PE/Cyanine7 anti-human CD4, Spark Violet™ 500 anti-human CD4, GMP PerCP/Cyanine5.5 anti-human CD4

Product Data



Human peripheral blood lymphocytes were stained with CD4 (clone SK3) Alexa Fluor® 700 (filled histogram) or mouse IgG1, κ Alexa Fluor® 700 (open histogram).

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