

Spark NIR™ 685 anti-human CD4 Antibody

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|--------------------------|---|
| Catalog# / Size | 344657 / 25 tests 344658 / 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

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| 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 Spark NIR™ 685 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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. Spark NIR™ 685 has a maximum excitation of 665 nm and a maximum emission of 685 nm. |
| 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. Hassani Nia F, <i>et al.</i> 2020. <i>Journal of Neurochemistry.</i> 155(3):250-263. PubMed2. Turner JS, <i>et al.</i> 2021. <i>Nature.</i> 596:109. PubMed3. Mudd PA, <i>et al.</i> 2022. <i>Cell.</i> 185:603. PubMed |
| RRID | AB_2819980 (BioLegend Cat. No. 344657) AB_2819981 (BioLegend Cat. No. 344658) |

Antigen Details

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|---------------------------|--|
| 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 |

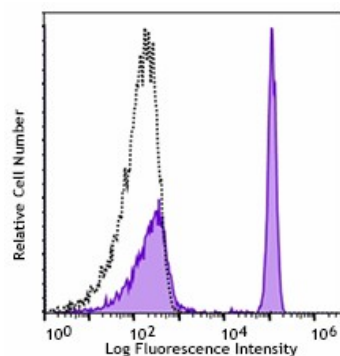
Related Protocols

[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 CD3 (clone SK3, filled histogram) Spark NIR™ 685 or cells were left unstained (open histogram).

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