

## Spark Red™ 718 anti-human CD4 Antibody

<b>Catalog# / Size</b>	344687 / 25 tests 344688 / 100 tests
<b>Clone</b>	SK3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	T4, Leu3a
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

---

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Spark Red™ 718 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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. It is recommended that the reagent be titrated for optimal performance for each application.  * Spark Red™ 718 has a maximum excitation of 697 nm and a maximum emission of 718 nm.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application References</b>	1. Evans RL, <i>et al.</i> 1981. <i>Immunol.</i> 78:544 2. Arno A <i>et al.</i> 1999. <i>J. Infect. Dis.</i> 180:56 3. Muech M, <i>et al.</i> 1997. <i>Blood</i> 89:1364 4. Wang L, <i>et al.</i> 2012. <i>Cytometry A.</i> 81:567. <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_2924542 (BioLegend Cat. No. 344687) AB_2924542 (BioLegend Cat. No. 344688)

### Antigen Details

---

<b>Structure</b>	Ig superfamily, type I transmembrane glycoprotein, 55 kD
<b>Distribution</b>	T cell subset, majority of thymocytes, monocytes/macrophages
<b>Function</b>	MHC class II co-receptor, lymphocyte adhesion, thymic differentiation, HIV receptor

<b>Ligand/Receptor</b>	MHC class II molecules, HIV gp120, IL-16
<b>Cell Type</b>	Macrophages, Monocytes, T cells, Thymocytes, Tregs
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	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.
<b>Gene ID</b>	<a href="#">920</a>

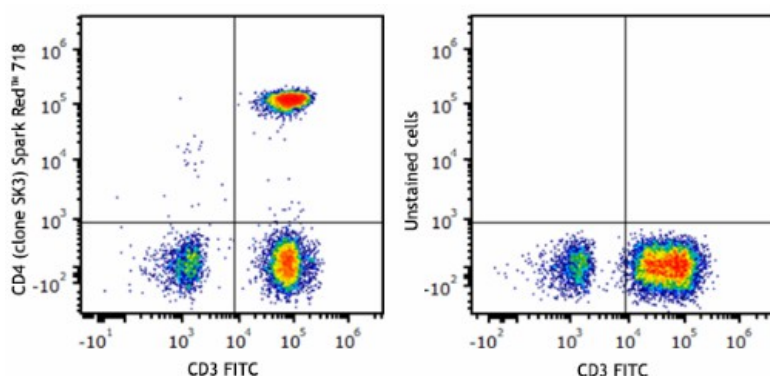
## Related Protocols

[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 anti-human CD3 FITC and anti-human CD4 (clone SK3) Spark Red™ 718 (left) or stained with anti-human CD3 FITC only (right).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587

