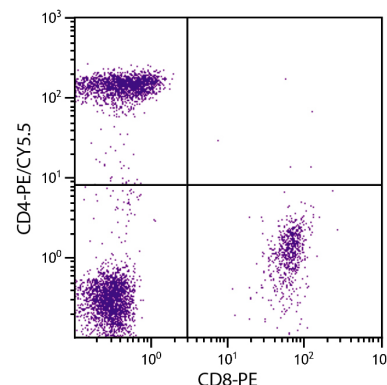




## Mouse Anti-Human CD4

Cat. No.	Format	Size
9522-01	Purified (UNLB)	0.1 mg
9522-02	Fluorescein (FITC)	100 tests
9522-02S	Fluorescein (FITC)	25 tests
9522-08	Biotin (BIOT)	100 tests
9522-09	R-phycoerythrin (PE)	100 tests
9522-09S	R-phycoerythrin (PE)	25 tests
9522-10	R-phycoerythrin-Texas Red® (PE/TXRD)	100 tests
9522-11	Allophycocyanin (APC)	100 tests
9522-11S	Allophycocyanin (APC)	25 tests
9522-13	Spectral Red® (SPRD)	100 tests
9522-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
9522-15	Cyanine 5 (CY5)	100 tests
9522-16	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	100 tests
9522-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	100 tests
9522-19	Allophycocyanin-Cyanine 7 (APC/CY7)	100 tests
9522-27	Alexa Fluor® 700 (AF700)	100 tests
9522-30	Alexa Fluor® 488 (AF488)	100 tests
9522-31	Alexa Fluor® 647 (AF647)	100 tests



Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD4-PE/CY5.5 (SB Cat. No. 9522-16) and Mouse Anti-Human CD8-PE (SB Cat. No. 9536-09).

### Overview

<b>Clone</b>	RFT4
<b>Isotype</b>	Mouse (BALB/c) IgG <sub>1</sub> K
<b>Immunogen</b>	Thymocyte and E-rosetted lymphocytes
<b>Specificity</b>	Human CD4; Mr 55 kDa
<b>Alternate Name(s)</b>	T4, Leu-3
<b>Workshop</b>	N/A

### Description

CD4 is a 55 kDa type I transmembrane glycoprotein and a member of the Ig-SF of cell surface receptors. It is expressed predominantly on the "helper/inducer" subpopulation of mature T lymphocytes and on monocytes and macrophages. Domains 1 and 2 bind to MHC Class II antigens, while domains 3 and 4 may be involved in cis interactions with the CD3/TCR complex. CD4 functions as an accessory molecule in the recognition of foreign antigens in association with MHC class II antigens by T cells.

### Applications

FC – Quality tested <sup>1,7-9</sup>  
 IHC-FS – Reported in literature <sup>3</sup>  
 ICC – Reported in literature <sup>4,5</sup>  
 WB – Reported in literature <sup>2</sup>  
 Sep – Reported in literature <sup>6</sup>

### Working Dilutions

<b>Flow Cytometry</b>	Purified (UNLB) antibody	≤ 1 µg/10 <sup>6</sup> cells
	FITC, BIOT, PE, PE/TXRD, APC, SPRD, CY5, PE/CY5.5, PE/CY7, APC/CY7, AF488, AF647, and AF700 conjugates	10 µL/10 <sup>6</sup> cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	

<b>Other Applications</b>	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.
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**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

## Handling and Storage

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Texas Red® (PE/TXRD), R-phycoerythrin-Cyanine 5.5 (PE/CY5.5), R-phycoerythrin-Cyanine 7 (PE/CY7), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Cyanine 5 (CY5) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

## Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

## References

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3. Hufert FT, van Lunzen J, Janossy G, Bertram S, Schmitz J, Haller O, et al. Germinal centre CD4<sup>+</sup> T cells are an important site of HIV replication in vivo. AIDS. 1997;11:849-57. (IHC-FS)
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6. D'Acquisto F, Paschalidis N, Raza K, Buckley CD, Flower RJ, Perretti M. Glucocorticoid treatment inhibits annexin-1 expression in rheumatoid arthritis CD4<sup>+</sup> T cells. Rheumatology. 2008;47:636-9. (Sep)
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8. Zariffard MR, Saifuddin M, Finnegan A, Spear GT. HSV type 2 infection increases HIV DNA detection in vaginal tissue of mice expressing human CD4 and CCR5. AIDS Res Hum Retroviruses. 2009;25:1157-64. (FC)
9. Roetenynck S, Olotu A, Simam J, Marsh K, Stockinger B, Urban B, et al. Phenotypic and functional profiling of CD4 T cell compartment in distinct populations of healthy adults with different antigenic exposure. PLoS One. 2013;8(1):e55195. (FC)

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