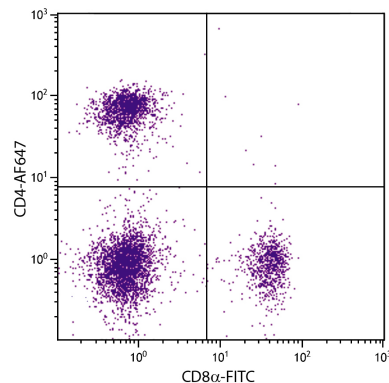




Rat Anti-Mouse CD4

Cat. No.	Format	Size
1540-01	Purified (UNLB)	0.5 mg
1540-02	Fluorescein (FITC)	0.5 mg
1540-02S	Fluorescein (FITC)	0.1 mg
1540-08	Biotin (BIOT)	0.5 mg
1540-09	R-phycoerythrin (PE)	0.1 mg
1540-09L	R-phycoerythrin (PE)	0.2 mg
1540-10	R-phycoerythrin-Texas Red® (PE/TXRD)	0.1 mg
1540-11	Allophycocyanin (APC)	0.1 mg
1540-13	Spectral Red® (SPRD)	0.1 mg
1540-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1540-15	Cyanine 5 (CY5)	0.1 mg
1540-16	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	0.1 mg
1540-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg
1540-18	Allophycocyanin-Cyanine 5.5 (APC/CY5.5)	0.1 mg
1540-19	Allophycocyanin-Cyanine 7 (APC/CY7)	0.1 mg
1540-26	Pacific Blue™ (PACBLU)	0.1 mg
1540-27	Alexa Fluor® 700 (AF700)	0.1 mg
1540-30	Alexa Fluor® 488 (AF488)	0.1 mg
1540-31	Alexa Fluor® 647 (AF647)	0.1 mg



BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD4-AF647 (SB Cat. 1540-31) and Rat Anti-Mouse CD8α-FITC (SB Cat. No. 1550-02).

Overview

Clone	GK1.5
Isotype	Rat (Lewis) IgG _{2b} K
Immunogen	Mouse CTL clone V4
Specificity	Mouse CD4; Mr 55 kDa
Alternate Name(s)	L3T4, Ly-4

Description

CD4 is a type I transmembrane glycoprotein expressed on most thymocytes and the helper/inducer subpopulation of mature T lymphocytes of all mouse strains tested. CD4 has also been detected at low density on pluripotent hematopoietic stem cells, bone marrow myeloid precursors, and intrathymic lymphoid precursors. The CD4 antigen functions as a co-receptor, interacting with class II major histocompatibility complex (MHC) molecules in the recognition of foreign antigens by T cells. *In vivo* and *in vitro* treatment with the GK1.5 monoclonal antibody effectively depletes CD4⁺ cells. GK1.5 also blocks helper T cell responses to MHC class II antigens, including cytolysis, proliferation, allogeneic B cell help, and release of lymphokines.

Applications

FC – Quality tested ^{1,5,7,11-15}
 IHC-FS – Reported in literature ²⁻⁴
 ICC – Reported in literature ⁵
 IP – Reported in literature ¹
 Depletion – Reported in literature ^{1,7,8}
 Sep – Reported in literature ^{6,9,10}
 Block – Reported in literature ^{1,8}

Working Dilutions

Flow Cytometry	FITC, BIOT, AF488, and PACBLU conjugates	≤ 1 µg/10 ⁶ cells
	PE, APC, PE/TXRD, SPRD, CY5, PE/CY5.5, PE/CY7, APC/CY5.5, APC/CY7, AF647, and AF700 conjugates	≤ 0.2 µg/10 ⁶ cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL		

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 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 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ 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 7 (PE/CY7), R-phycoerythrin-Cyanine 5.5 (PE/CY5.5), allophycocyanin-Cyanine 5.5 (APC/CY5.5), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ 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 of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- The Cyanine 5 (CY5) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The Alexa Fluor[®] 488 (AF488), Alexa Fluor[®] 647 (AF647), Alexa Fluor[®] 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. 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 (M)SDS.

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