

## ARG21984 anti-CD4 antibody [GK1.5] (PE-Cyanine 7)

Package: 50 µg  
Store at: 4°C

### Summary

Product Description	PE-Cyanine 7-conjugated Rat Monoclonal antibody [GK1.5] recognizes CD4
Tested Reactivity	Ms
Tested Application	BL, Depletion, FACS, ICC/IF, IHC-Fr
Specificity	Mouse CD4
Host	Rat
Clonality	Monoclonal
Clone	GK1.5
Isotype	IgG2b, kappa
Target Name	CD4
Species	Mouse
Immunogen	Mouse CTL clone V4
Conjugation	PE-Cyanine 7
Alternate Names	CD4mut; CD antigen CD4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3

### Application Instructions

Application table	Application	Dilution
	BL	Assay-dependent
	Depletion	Assay-dependent
	FACS	< 0.2 µg/10 <sup>6</sup> cells
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Buffer	PBS, 0.1% Sodium azide and Sucrose.
Preservative	0.1% Sodium azide
Stabilizer	Sucrose
Concentration	0.1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

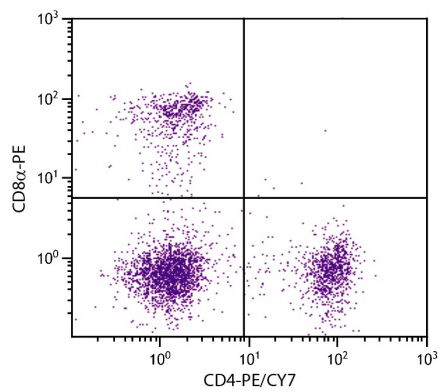
repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Database links	<a href="#">GeneID: 12504 Mouse</a> <a href="#">Swiss-port # P06332 Mouse</a>
Gene Symbol	CD4
Gene Full Name	CD4 antigen
Background	CD4 is a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens and is also a receptor for the human immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. It is also expressed in specific regions of the brain. The protein functions to initiate or augment the early phase of T-cell activation, and may function as an important mediator of indirect neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcript variants encoding different isoforms have been identified in this gene. [provided by RefSeq, Aug 2010]
Function	CD4 is an integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class II molecule:peptide complex. The antigens presented by class II peptides are derived from extracellular proteins while class I peptides are derived from cytosolic proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class II presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of T-helper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cytokine expression and cell migration in a TCR/LCK-independent pathway. Participates in the development of T-helper cells in the thymus and triggers the differentiation of monocytes into functional mature macrophages. [UniProt]
Highlight	Related products: <a href="#">CD4 antibodies</a> ; <a href="#">CD4 ELISA Kits</a> ; <a href="#">CD4 Duos / Panels</a> ; <a href="#">Anti-Rat IgG secondary antibodies</a> ; Related news: <a href="#">New antibody panels and duos for Tumor immune microenvironment</a> <a href="#">Tumor-Infiltrating Lymphocytes (TILs)</a>
Research Area	Developmental Biology antibody; Immune System antibody; Regulatory T cells Study antibody; T-cell infiltration Study antibody; Tumor-infiltrating Lymphocyte Study antibody
Calculated Mw	51 kDa
PTM	Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.



ARG21984 anti-CD4 antibody [GK1.5] (PE-Cyanine 7) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG21984 anti-CD4 antibody [GK1.5] (PE-Cyanine 7) and ARG62941 anti-CD8a antibody [53-6.7] (PE).