

# Product datasheet

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# ARG62837 anti-CD4 antibody [GK1.5] (FITC)

Package: 100 μg Store at: 4°C

# **Summary**

Product Description FITC-conjugated Rat Monoclonal antibody [GK1.5] recognizes CD4

Tested Reactivity Ms

Tested Application FACS, ICC/IF, IHC-Fr

Specificity The clone GK1.5 reacts with an extracellular epitope of mouse CD4 transmembrane glycoprotein (55

kDa).

Host Rat

Clonality Monoclonal

Clone GK1.5

Isotype IgG2b, kappa

Target Name CD4

Species Mouse

Immunogen Mouse CTL clone V4 cells

Epitope extracellular epitope of mouse CD4

Conjugation FITC

Alternate Names CD4mut; CD antigen CD4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3

# **Application Instructions**

Application table	Application	Dilution
	FACS	3 μg/ml
	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

Purification Note The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions.

The reagent is free of unconjugated FITC.

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 0.5 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

Database links GeneID: 12504 Mouse

Swiss-port # P06332 Mouse

Gene Symbol CD4

Gene Full Name CD4 molecule

Background CD4 is a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex

class II antigenes 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:

CD4 antibodies; CD4 ELISA Kits; CD4 Duos / Panels; Anti-Rat IgG secondary antibodies;

Related news:

New antibody panels and duos for Tumor immune microenvironment

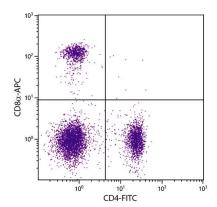
Tumor-Infiltrating Lymphocytes (TILs)

Research Area Developmental Biology antibody; Immune System antibody; Regulatory T cells Study antibody; T-cell

infiltration Study antibody; Tumor-infiltrating Lymphocyte Study antibody

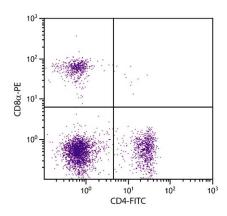
Calculated Mw 51 kDa

PTM Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.



# ARG62837 anti-CD4 antibody [GK1.5] (FITC) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with  $\frac{ARG53910}{ARG62837}$  anti-CD8a antibody [53-6.7] (APC) and  $\frac{ARG62837}{ARG62837}$  anti-CD4 antibody [GK1.5] (FITC).



#### ARG62837 anti-CD4 antibody [GK1.5] (FITC) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG62837 anti-CD4 antibody [GK1.5] (FITC) and <u>ARG62941</u> anti-CD8a antibody [53-6.7] (PE).