

## Product datasheet

info@arigobio.com

# ARG22345 anti-CD4 antibody [CT-4] (APC)

Package: 50 μg Store at: 4°C

#### **Summary**

Product Description APC-conjugated Mouse Monoclonal antibody [CT-4] recognizes CD4

Tested Reactivity Chk

Tested Application BL, FACS, IHC-Fr, IHC-P

Specificity Chicken / Turkey / Quail / Pigeon CD4

Host Mouse

Clonality Monoclonal

Clone CT-4

Isotype IgG1, kappa

Target Name CD4

Species Chicken

Immunogen Chicken thymocytes and Ig-negative blood leukocytes.

Conjugation APC

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
	FACS	< 0.1 ug/10^6 cells
	IHC-Fr	Assay-dependent
	IHC-P	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.

#### Bioinformation

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-Mouse 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

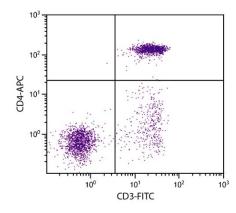
Calculated Mw

51 kDa

PTM

Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts. [UniProt]

## **Images**



#### ARG22345 anti-CD4 antibody [CT-4] (APC) FACS image

Flow Cytometry: Chicken peripheral blood lymphocytes stained with ARG22345 anti-CD4 antibody [CT-4] (APC) and <u>ARG21151</u> anti-CD3 antibody [CT-3] (FITC).