

Product datasheet

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ARG21157 anti-CD4 antibody [CT-4] (Biotin)

Package: 100 μg Store at: 4°C

Summary

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

Tested Reactivity Chk, Turkey

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

Specificity Chicken/Turkey/Quail CD4. The clone CT-4 inhibits both PHA- and Con A-induced proliferative

responses of splenocytes and PWM-induced IL-2 production. This antibody also reacts with turkey and

quail as demonstrated by flow cytometry.

Host Mouse

Clonality Monoclonal

Clone CT-4

Isotype IgG1, kappa

Target Name CD4

Species Chicken

Immunogen Chicken thymocytes and Ig-negative blood leukocytes

Conjugation Biotin

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	< 1 μg/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 and 0.1% Sodium azide.	
Preservative	0.1% 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.	

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

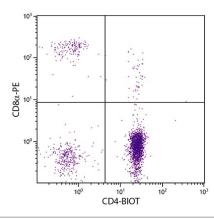
Calculated Mw

51 kDa

PTM

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

Images



ARG21157 anti-CD4 antibody [CT-4] (Biotin) FACS image

Flow Cytometry: Chicken peripheral blood lymphocytes stained with ARG21157 anti-CD4 antibody [CT-4] (Biotin) and <u>ARG21162</u> anti-CD8a antibody [CT-8] (PE) followed by Streptavidin (FITC).