

Product datasheet

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ARG21123 anti-CD4 antibody [74-12-4] (PE)

Package: 50 μg Store at: 4°C

Summary

Product Description PE-conjugated Mouse Monoclonal antibody [74-12-4] recognizes CD4

Tested Reactivity Pig

Tested Application BL, FACS, ICC/IF, IHC-Fr, IHC-P

Specificity Porcine CD4.

Host Mouse

Clonality Monoclonal

Clone 74-12-4

Isotype IgG2b, kappa

Target Name CD4
Species Pig

Immunogen Fresh dd miniature swine thymocytes

Conjugation PE

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	< 0.2 µg/10^6 cells
	ICC/IF	Assay-dependent
	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.

Note

For laboratory research only, not for drug, diagnostic or other 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

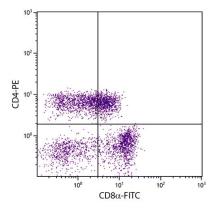
infiltration Study antibody; Tumor-infiltrating Lymphocyte Study antibody

Calculated Mw 51 kD

PTM

 $\label{lem:palmitoylation} \textit{Palmitoylation} \ \textit{and} \ \textit{association} \ \textit{with} \ \textit{LCK} \ \textit{contribute} \ \textit{to} \ \textit{the} \ \textit{enrichment} \ \textit{of} \ \textit{CD4} \ \textit{in} \ \textit{lipid} \ \textit{rafts}.$

Images



ARG21123 anti-CD4 antibody [74-12-4] (PE) FACS image

Flow Cytometry: Porcine peripheral blood lymphocytes stained with ARG21123 anti-CD4 antibody [74-12-4] (PE) and <u>ARG21126</u> anti-CD8a antibody [76-2-11] (FITC).