

### ARG21124 anti-CD4 antibody [74-12-4] (PE-Cyanine 5)

Package: 50 μg Store at: 4°C

# Summary

Product Description	PE-Cyanine 5-conjugated Mouse Monoclonal antibody [74-12-4] recognizes CD4
Tested Reactivity	Pig
Tested Application	BL, FACS, IHC-Fr, IHC-P
Specificity	Porcine CD4.
Host	Mouse
Clonality	Monoclonal
Clone	74-12-4
Isotype	lgG2b, kappa
Target Name	CD4
Species	Pig
Immunogen	Fresh dd miniature swine thymocytes
Conjugation	PE-Cyanine 5
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
	IHC-Fr	Assay-dependent
	IHC-P	Assay-dependent
Application Note	* The dilutions indicate r should be determined by	recommended starting dilutions and the optimal dilutions or concentrations y the scientist.

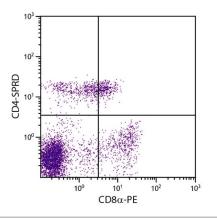
#### Properties

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: <u>CD4 antibodies; CD4 ELISA Kits; CD4 Duos / Panels; Anti-Mouse IgG secondary antibodies;</u> Related news: <u>New antibody panels and duos for Tumor immune microenvironment</u> <u>Tumor-Infiltrating Lymphocytes (TILs)</u>
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



#### ARG21124 anti-CD4 antibody [74-12-4] (PE-Cyanine 5) FACS image

Flow Cytometry: Porcine peripheral blood lymphocytes stained with ARG21124 anti-CD4 antibody [74-12-4] (PE-Cyanine 5) and <u>ARG21128</u> anti-CD8a antibody [76-2-11] (PE).