

**ARG23430**  
**anti-CD4 antibody [44.38]**Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [44.38] recognizes CD4 Mouse anti Sheep CD4 antibody, clone 44.38 recognizes the ovine CD4 cell surface glycoprotein, which is expressed by a subset of mature T lymphocytes. Mouse anti Sheep CD4 antibody, clone 44.38 immunoprecipitates a protein of ~56 kDa under reducing conditions.
Tested Reactivity	Goat, Sheep
Tested Application	FACS, ICC/IF, IHC-Fr, IP
Host	Mouse
Clonality	Monoclonal
Clone	44.38
Isotype	IgG2a
Target Name	CD4
Species	Sheep
Immunogen	Fetal thymocytes.
Conjugation	Un-conjugated
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	Neat - 1:5
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
Application Note	FACS: Use 10 µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100 µl. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml

<b>Storage instruction</b>	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
<b>Note</b>	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

<b>Gene Symbol</b>	CD4
<b>Gene Full Name</b>	CD4 molecule
<b>Background</b>	CD4 is a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens 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]
<b>Function</b>	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]
<b>Highlight</b>	Related products: <a href="#">CD4 antibodies</a> ; <a href="#">CD4 ELISA Kits</a> ; <a href="#">CD4 Duos / Panels</a> ; <a href="#">Anti-Mouse IgG secondary antibodies</a> ; Related news: <a href="#">New antibody panels and duos for Tumor immune microenvironment</a> <a href="#">Tumor-Infiltrating Lymphocytes (TILs)</a>
<b>Research Area</b>	Developmental Biology antibody; Immune System antibody; Regulatory T cells Study antibody; T-cell infiltration Study antibody; Tumor-infiltrating Lymphocyte Study antibody
<b>Calculated Mw</b>	51 kDa
<b>PTM</b>	Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts. [UniProt]