

**ARG62831**  
**anti-CD4 antibody [MEM-241] (Biotin)**Package: 100 µg  
Store at: 4°C

### Summary

Product Description	Biotin-conjugated Mouse Monoclonal antibody [MEM-241] recognizes CD4
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone MEM-241 recognizes CD4 antigen, a 55 kDa transmembrane glycoprotein expressed on a subset of T lymphocytes ("helper" T-cells) and also on monocytes, tissue macrophages and granulocytes. HCDM (former HLDA VIII) Meeting, May 2006, Québec, Canada; WS Code M241
Host	Mouse
Clonality	Monoclonal
Clone	MEM-241
Isotype	IgG1
Target Name	CD4
Species	Human
Immunogen	2 N-terminal domains of human CD4 fused to human IgG1 Fc
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
	FACS	1 µg/ml

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

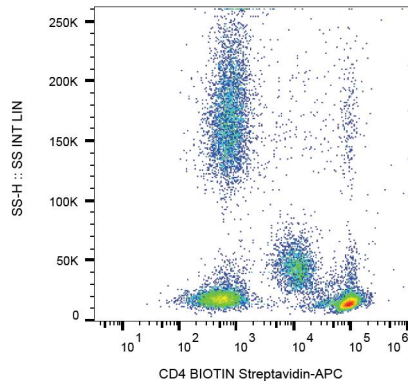
Form	Liquid
Purification Note	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	Aliquot and store in the dark 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

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Database links	<a href="#">GeneID: 920 Human</a> <a href="#">Swiss-port # P01730 Human</a>
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 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]
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: <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>
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.



ARG62831 anti-CD4 antibody [MEM-241] (Biotin) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG62831 anti-CD4 antibody [MEM-241] (Biotin), followed by Streptavidin (APC).