

Product datasheet for **AM26029LE-N**

Cd4 Rat Monoclonal Antibody [Clone ID: GK1.5]

Product data:

Product Type:	Primary Antibodies
Clone Name:	GK1.5
Applications:	FC, FN, IF, IHC, IP
Recommended Dilution:	Flow cytometry: 1 µg/million cells. Immunoprecipitation: 1-2 µg/100-500 µg of protein in 1 ml lysate. Immunohistochemistry (frozen sections). Immunocytochemistry: 1-4 µg/ml. Functional application: Isolation and depletion of CD4+ T cells, blocking of ligand binding to CD4.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Mouse CTL clone V4 cells
Specificity:	This antibody reacts with an extracellular epitope of mouse CD4 transmembrane glycoprotein (55 kDa).
Formulation:	Azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized State: Low Endotoxin State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein-G affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Gene Name:	CD4 antigen
Database Link:	Entrez Gene 12504 Mouse P06332



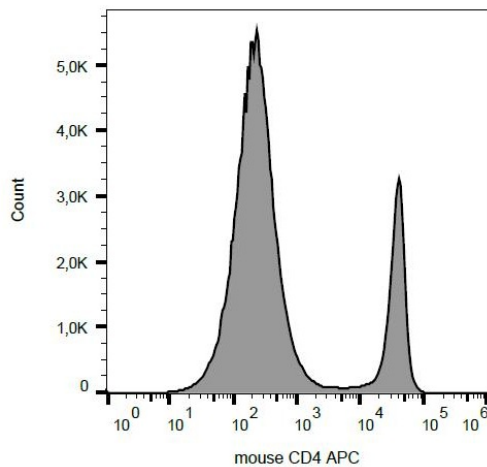
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Background:

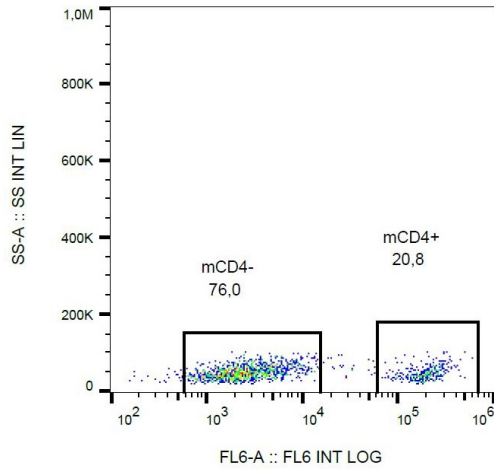
CD4 is a single chain transmembrane glycoprotein of immunoglobulin supergene family. In its extracellular region there are 4 immunoglobulin-like domains (1 Ig-like V-type and 3 Ig-like C2-type). The intracellular region of CD4 associates with p56Lck, a Src-like protein tyrosine kinase. It was described that CD4 segregates into specific detergent-resistant T-cell membrane microdomains. CD4 binds to MHC class II molecules (by CDR2-like region in CD4 domain 1), HIV envelope protein gp120 (by CDR2-like region in CD4 domain 1) and other ligands, such as IL-16 (by to CD4 domain 3) or L-selectin. CD4 is a co-receptor involved in immune response (co-receptor activity in binding to MHC class II molecules) and HIV infection. CD4 regulates T-cell activation, T/B-cell adhesion, T-cell differentiation, T-cell selection and signal transduction. Defects in antigen presentation (MHC class II) cause dysfunction of CD4+ T-cells and their almost complete absence in patients blood, tissue and organs (SCID immunodeficiency).

Synonyms:

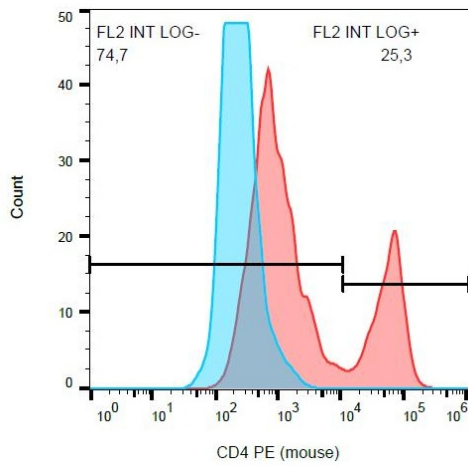
T-cell surface antigen T4/Leu-3

Product images:

Surface staining of CD4 in murine splenocytes with anti-CD4 (GK1.5) APC.



Surface staining of CD4 in murine splenocytes with anti-CD4 (GK1.5) azide free, DAR/APC.



Surface staining of CD4 in murine splenocytes with anti-CD4 (GK1.5) PE.