

Product datasheet for AM26029AF-N

OriGene Technologies, Inc.

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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 on 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 PBS, pH~7.4, 0.2 μm filter sterilized

State: Azide Free

State: Liquid purified IgG fraction

Concentration: lot specific

Purification: Purified by 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



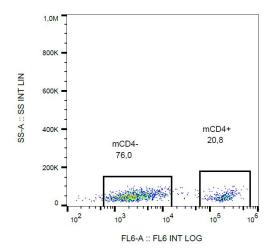


Background:

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 diferentiation, 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) azide free, DAR/APC.