

30-1624: Anti-CD4 Monoclonal Antibody (Clone:GK1.5)-Low Endotoxin

Clonality :	Monoclonal
Clone Name :	GK1.5
Application :	FACS, IP, IHC-Fr, ICC, Functional Assay
Reactivity :	Mouse
Gene :	Cd4
Gene ID :	12504
Uniprot ID :	P06332
Format :	Low Endotoxin
Alternative Name :	Cd4
Isotype :	Rat IgG2b
Immunogen Information :	Mouse CTL clone V4 cells

Description

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).

Product Info

Amount :	0.1 mg
Purification :	Purified by protein-G affinity chromatography
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow Cytometry *Recommended dilution:* 1 $\mu\text{g}/\text{million cells}$

Immunoprecipitation *Recommended dilution:* 1-2 $\mu\text{g}/100-500 \mu\text{g}$ of protein in 1 ml lysate

Immunohistochemistry (frozen sections) Immunocytochemistry *Recommended dilution:* 1-4 $\mu\text{g}/\text{ml}$

Functional Application Isolation and depletion of CD4+ T cells, blocking of ligand binding to CD4.