

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

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

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

### Application Note

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

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