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Rat Anti-CD4 (Mouse) - Azide Free Monoclonal Antibody

CLX401NA

Lot:

Size: 0.1 mg

Clone: GK1.5

Isotype: Rat IgG2b

Specificity: The rat monoclonal antibody GK1.5 reacts with an extracellular epitope of mouse CD4 transmembrane glycoprotein (55 kDa).

Immunogen: Mouse CTL clone V4 cells

Species Reactivity: Mouse

Application: **Flow Cytometry**
Recommended dilution: 1 µg/million cells

Immunoprecipitation
Recommended dilution: 1-2 µg/100-500 µg of protein in 1 ml lysate

Immunohistochemistry (frozen sections)

Immunocytochemistry
Recommended dilution: 1-4 µg/ml

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

Purity: > 95% (by SDS-PAGE)

Purification: Purified by protein A

Concentration: 1 mg/ml

Storage Buffer: Azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized.

Storage / Stability: Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

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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).

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- *And many other.

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