

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **CD4** polyclonal antibody

Catalog: BS90243 Host: Rabbit Reactivity: Human

### **BackGround:**

Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class II molecule:peptide complex. The antigens presented by class II peptides are derived from extracellular proteins while class I peptides are derived from cytosolic proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class II presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of T-helper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cytokine expression and cell migration TCR/LCK-independent pathway. Participates in the development of T-helper cells in the thymus and triggers the differentiation of monocytes into functional mature macrophages.

## **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

## **Molecular Weight:**

51 kDa

#### **Swiss-Prot:**

P01730 Human

### **Purification&Purity:**

Protein affinity purified.

## **Applications:**

WB:1:500 FC:1:50-1:100

## Storage&Stability:

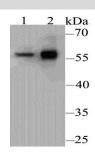
Store at +4 °C after thawing. Aliquot store at -20 °C.

Avoid repeated freeze / thaw cycles.

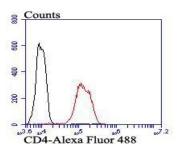
## **Specificity:**

CD4 polyclonal antibody detects endogenous levels of CD4 protein.

#### **DATA:**



Western blot analysis of CD4 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody was used at a 1:500 dilution in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature. Positive control: Lane 1: U937 cell lysate Lane 2: Human thymus tissue lysate



Flow cytometric analysis of CD4 was done on Hela cells. The cells were fixed, permeabilized and stained with CD4 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). After incubation of the primary antibody on room temperature for an hour, the cells was stained with a Alexa Fluor™ 488-conjugated goat anti-rabbit IgG Secondary antibody at 1/500 dilution for 30 minutes.

#### Note:

For research use only, not for use in diagnostic procedure.

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