

# Anti-CD4 Antibody

## ER1803-84



<b>Product Type:</b>	Rabbit polyclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	WB, FC
<b>Molecular Wt:</b>	51 kDa

**Description:** 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 in a 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.

**Immunogen:** Recombinant protein within Human CD4 1-300 aa.

**Positive control:** U937, human thymus tissue, Hela.

**Subcellular location:** Cell Membrane.

**Database links:** SwissProt: P01730 Human

**Recommended Dilutions:**

<b>WB</b>	1:500
<b>FC</b>	1:50-1:100

**Storage Buffer:** 1\*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

**Purity:** Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

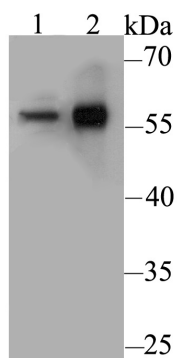
Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物  
HUABIO  
www.huabio.cn

## Images

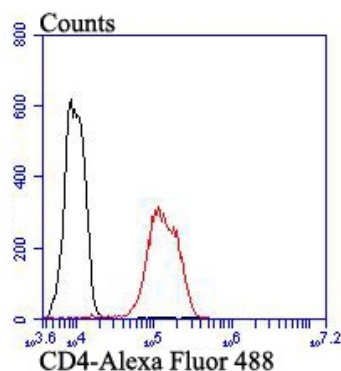


**Fig1:** Western blot analysis of CD4 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody was used at a 1:500 dilution in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (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



**Fig2:** 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:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Parnes J R et al. L3T4 and the immunoglobulin gene superfamily: new relationships between the immune system and the nervous system. *Immunol Rev* 100:109-127 (1987).
2. Gorman S D et al. Structure of the mouse gene encoding CD4 and an unusual transcript in brain. *Proc Natl Acad Sci USA* 84:7644-7648 (1987).
3. Rudd CE. CD4,CD8 and the TCR-CD3 complex: a novel class of protein-tyrosine kinase receptor. *Immunol Today* 11(11):400-406 (1990).

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物  
HUABIO  
www.huabio.cn