



Rabbit Anti-CD4 antibody

SL4817R

Product Name:	CD4
Chinese Name:	CD4抗体
Alias:	CD4 (L3T4); CD4 antigen (p55); CD4 Antigen ; CD4 molecule; CD4 Receptor; CD4+ Lymphocyte deficiency, included; CD4mut; L3T4; Leu3; Ly-4; Lymphocyte antigen CD4; MGC165891; p55; T Cell Antigen T4 ; T cell antigen T4/LEU3; T cell differentiation antigen L3T4; T cell OKT4 deficiency, included; T cell surface antigen T4/Leu 3 ; T cell surface antigen T4/Leu3; T Cell Surface Glycoprotein CD4; W3/25; W3/25 antigen; T-cell surface glycoprotein CD4 isoform 1 precursor; CD4 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000Flow-Cyt=3µg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	48kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CD4:301-400/458<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigenes and is also a receptor for the human

immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. It is also expressed in specific regions of the brain. The protein functions to initiate or augment the early phase of T-cell activation, and may function as an important mediator of indirect neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcript variants encoding different isoforms have been identified in this gene. [provided by RefSeq, Aug 2010].

Function:

Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts.

Subunit:

Associates with LCK. Binds to HIV-1 gp120 and to P4HB/PDI and upon HIV-1 binding to the cell membrane, is part of P4HB/PDI-CD4-CXCR4-gp120 complex. Interacts with HIV-1 Envelope polyprotein gp160 and protein Vpu. Interacts with Human Herpes virus 7 capsid proteins. Interacts with PTK2/FAK1; this interaction requires the presence of HIV-1 gp120.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Note=Localizes to lipid rafts. Removed from plasma membrane by HIV-1 Nef protein that increases clathrin-dependent endocytosis of this antigen to target it to lysosomal degradation. Cell surface expression is also down-modulated by HIV-1 Envelope polyprotein gp160 that interacts with, and sequesters CD4 in the endoplasmic reticulum.

Post-translational modifications:

Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.

Similarity:

Contains 3 Ig-like C2-type (immunoglobulin-like) domains.
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

SWISS:

P01730

Gene ID:

920

Database links:

[Entrez Gene: 920](#)Human

[Entrez Gene: 12504](#)Mouse

[Omim: 186940](#)Human

[SwissProt: P06332](#)Mouse

[SwissProt: P01730](#)Human

[Unigene: 631659](#)Human

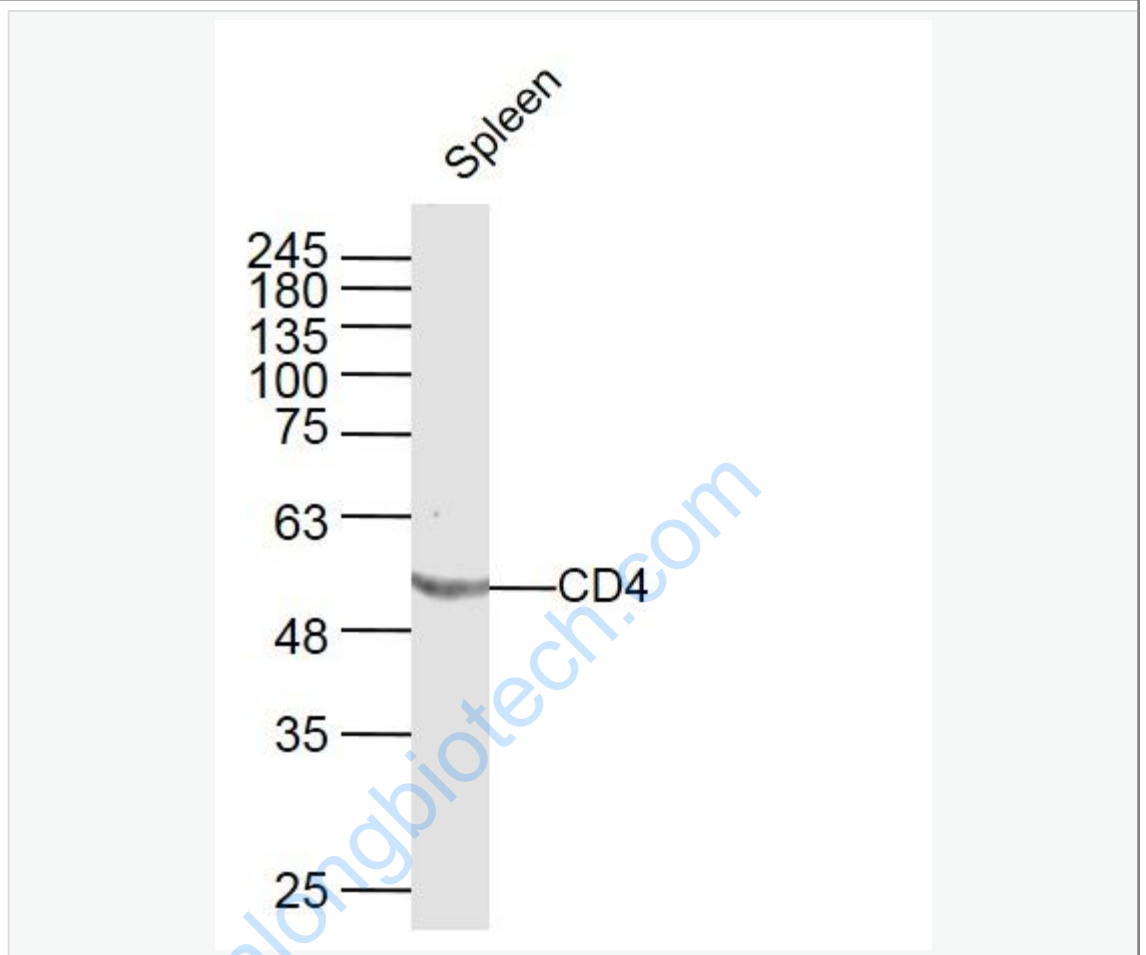
[Unigene: 2209](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

CD4分子是存在于大多数辅助/诱导T细胞表面的59kDa的glycoprotein。正常淋巴组织中CD4的表达数量多于CD8, 此抗体主要用于标记辅助/诱导T细胞, 与CD8单抗联合使用对外周血lymphocyte分型。CD4抗原是HLA-II类分子和人类免疫缺陷病毒(HIV)-爱滋病的受体, 在35-50%外周血lymphocyte-辅助和诱导T细胞(Th/Ti)和70-80%人胸腺细胞上表达, 在人的单核细胞表面也有低密度的表达。CD4抗原有膜结合型和可溶性两种形式。Th/Ti可辅助Ig产生和T细胞毒T细胞的作用。

Picture:



Sample:

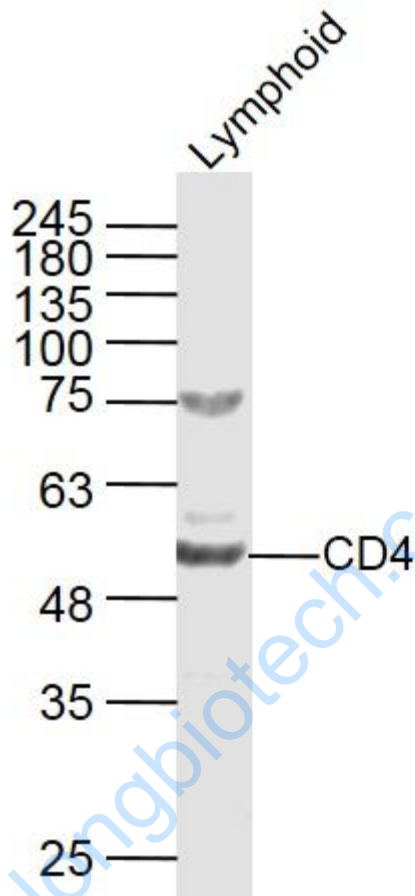
Spleen (Rat) Lysate at 40 ug

Primary: Anti-CD4 (SL4817R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

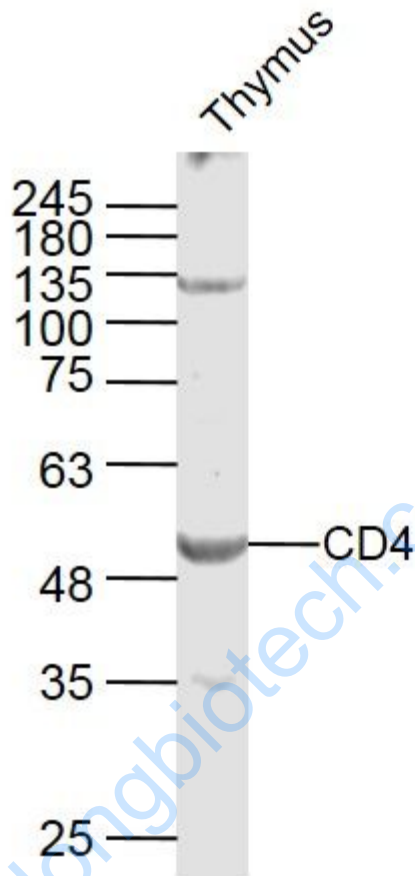
Lymphoid (Rat) Lysate at 40 ug

Primary: Anti-CD4 (SL4817R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

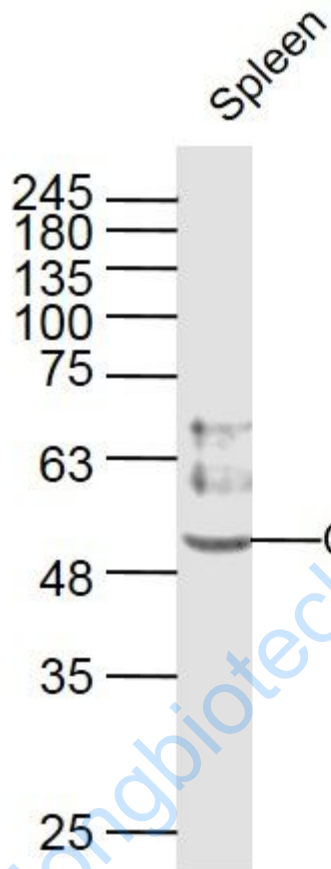
Thymus (Mouse) Lysate at 40 ug

Primary: Anti-CD4 (SL4817R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

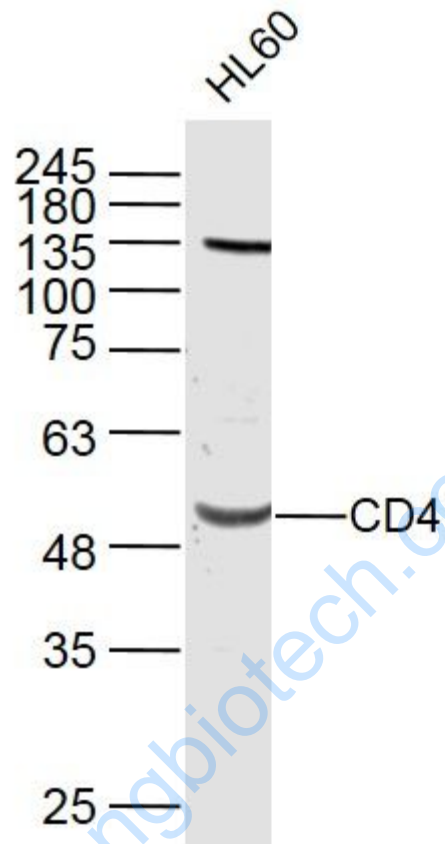
Spleen (Mouse) Lysate at 40 ug

Primary: Anti-CD4 (SL4817R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

HL60 Cell(human) Lysate at 30 ug

Primary: Anti-CD4 (SL4817R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD