



Rabbit Anti-CD4 antibody

SL0766R

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 MOUSE.
文献引用 	<p>Specific References(5) SL0766R has been referenced in 5 publications.</p> <p>[IF=3.06]Zhang, Wen, et al. "The role of CXCR3 in the induction of primary biliary cirrhosis." <i>Clinical and Developmental Immunology</i> 2011 (2011).IHC-P;Mouse. PubMed:21647407</p> <p>[IF=1.85]Cheng, Lin, et al. "T cell immunohistochemistry refines lung transplant acute rejection diagnosis and grading."?<i>Diagnostic Pathology</i>?8.1 (2013): 168.IHC-P;Rat. PubMed:24330571</p> <p>[IF=2.12]Tzeng, Yuan-Sheng, et al. "Hypercapnic acidosis prolongs survival of skin allografts." <i>Journal of Surgical Research</i> (2014).IHC-P;Mouse. PubMed:25577144</p> <p>[IF=8.39]Wang, Raymond M., et al. "Humanized mouse model for assessing the human immune response to xenogeneic and allogeneic decellularized biomaterials." <i>Biomaterials</i> (2017).IHC;Mouse. PubMed:28334641</p> <p>[IF=3.03]Willett, Emily S., et al. "Standardized Rat Model Testing Effects of</p>

	Inflammation and Grafting on Extraction Healing." Journal of Periodontology (2017): 1-15.IHC;Rat. PubMed:28440741
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3µg/TestIF=1:100-500 (Paraffin sections need antigen repair) 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 the middle of mouse CD4:231-330/457<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:	<p>This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens 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].</p> <p>Function: Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts.</p> <p>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.</p>

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:

P06332

Gene ID:

12504

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

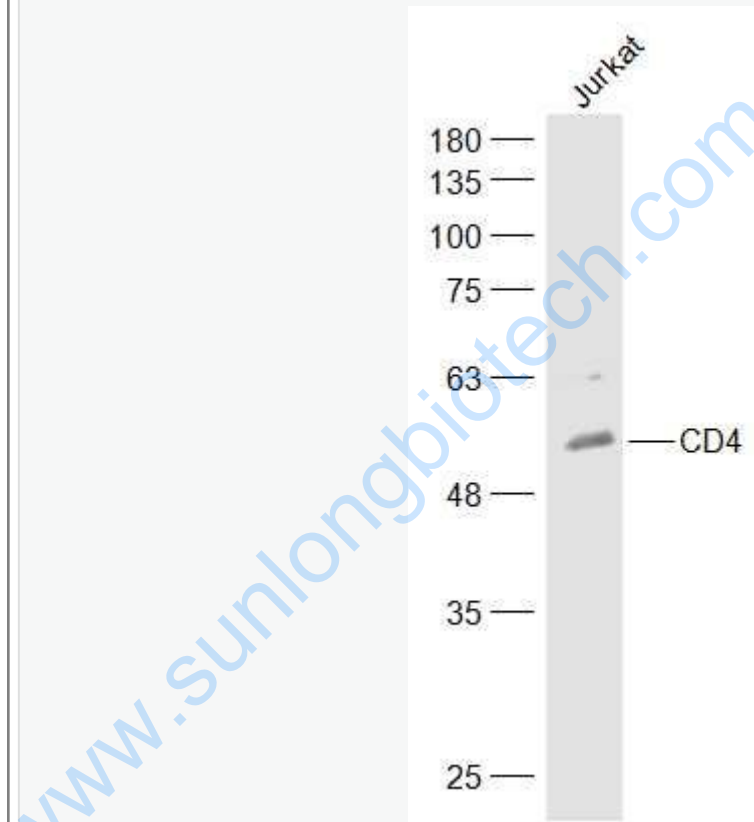
Important Note:

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

此抗体可识别55KD I 型单链穿膜glycoprotein。

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:

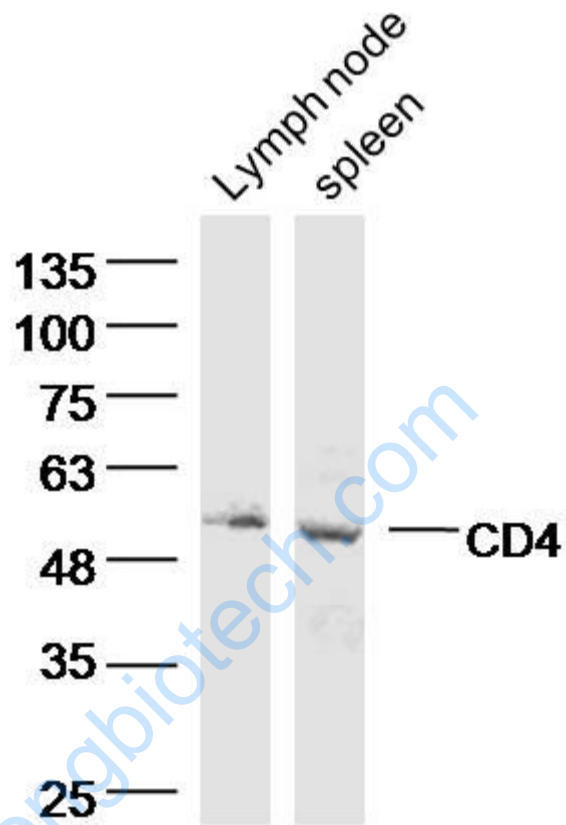
Jurkat(Human) Cell Lysate at 30 ug

Primary: Anti-CD4 (SL0766R) at 1/300 dilution

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

Predicted band size: 48 kD

Observed band size: 48 kD



Sample:

Lymph node (Mouse) Lysate at 40 ug

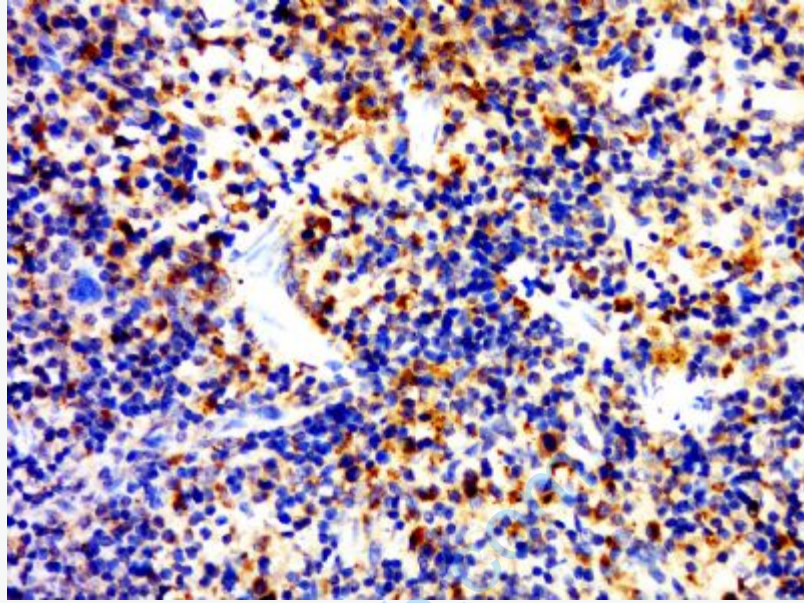
Spleen (Mouse) Lysate at 40 ug

Primary: Anti-CD4 (SL0766R) at 1/300 dilution

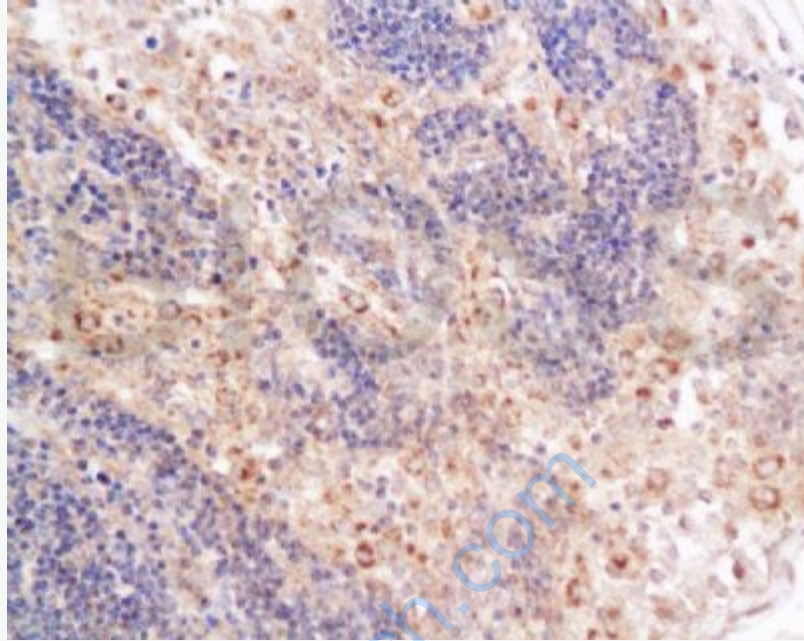
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 52 kD



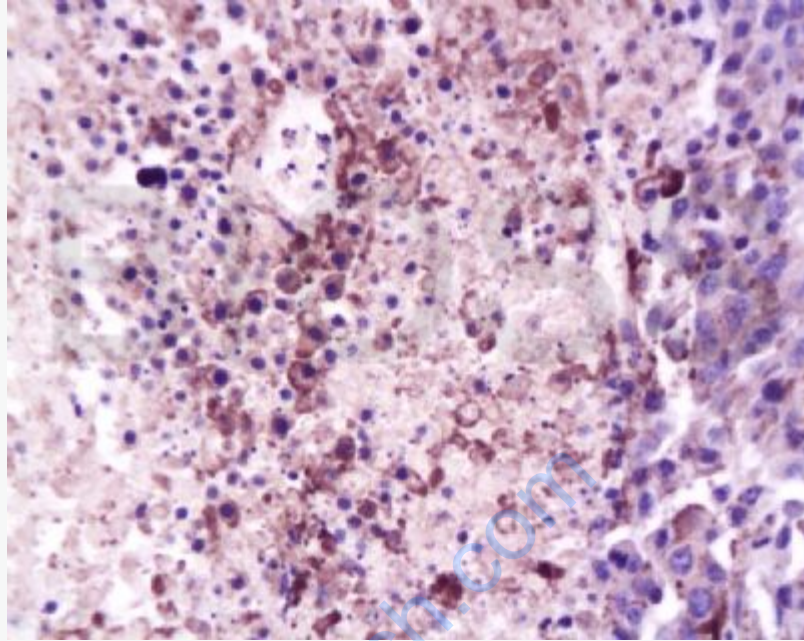
Paraformaldehyde-fixed, paraffin embedded (rat spleen); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD4) Polyclonal Antibody, Unconjugated (SL0766R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: mouse lymphoma tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

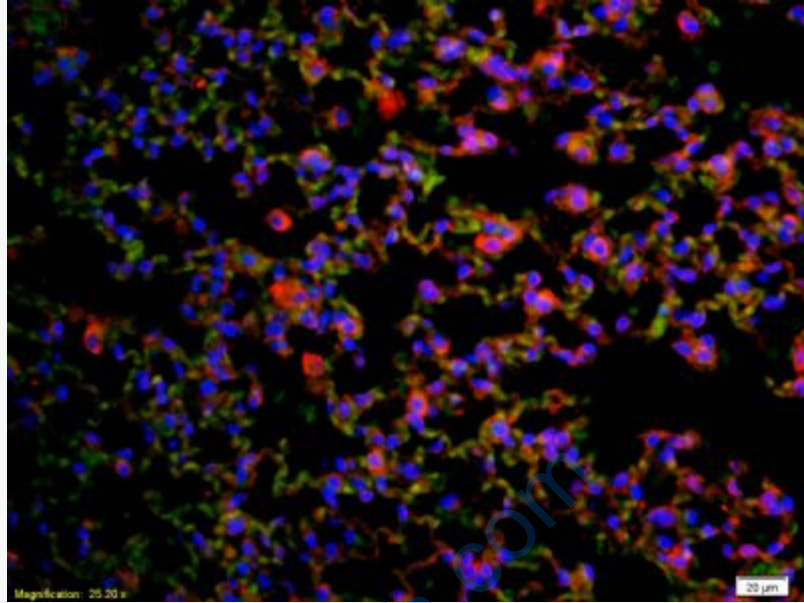
Incubation: Anti-CD4 Polyclonal Antibody, Unconjugated(SL0766R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



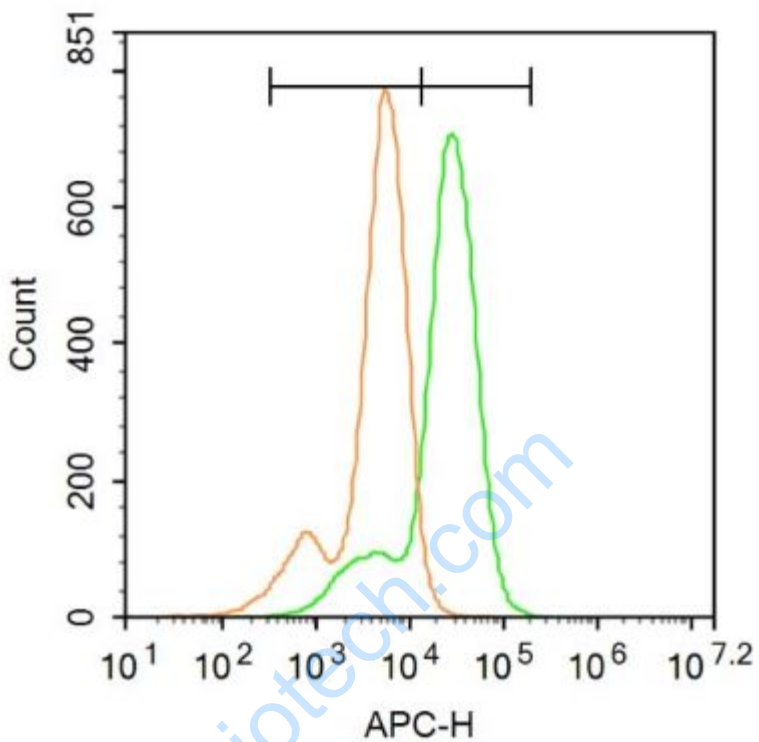
Tissue/cell: mouse lymphoma tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CD4 Polyclonal Antibody, Unconjugated(SL0766R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat lung tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min;
Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-CD4(mouse, rat) Polyclonal Antibody, Unconjugated(SL0766R)
1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3
conjugated(SL0766R)used at 1:200 dilution for 40 minutes at 37°C.
DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control: Mouse spleen.

Primary Antibody (green line): Rabbit Anti-CD4 antibody (SL0766R)

Dilution: 3 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

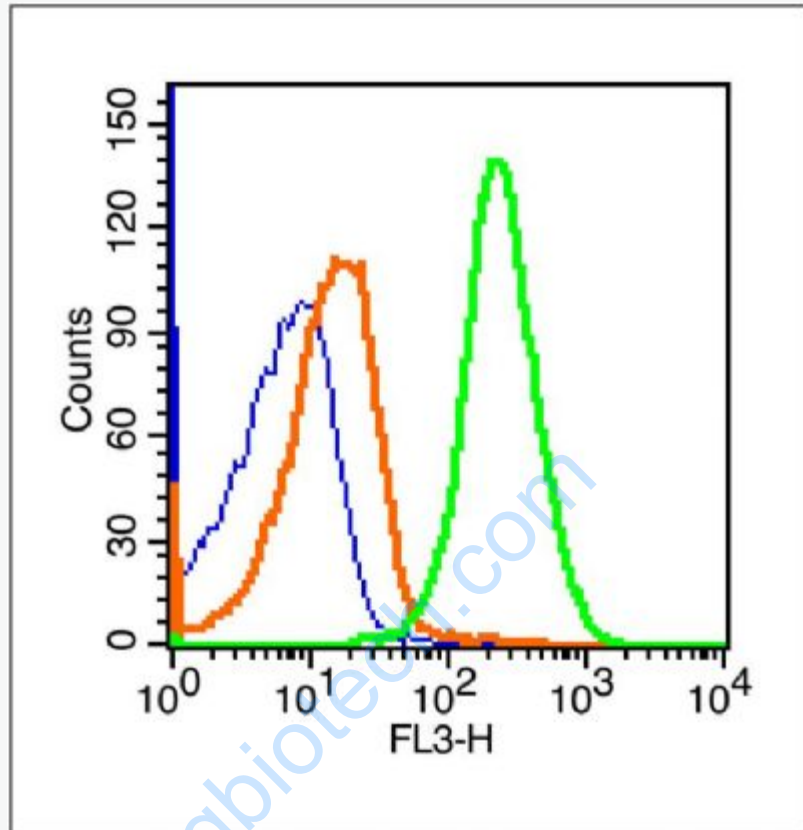
Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 3 μ g /test.

Protocol

The cells incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.



Blank control (blue line): Mouse spleen cells(blue).

Primary Antibody (green line): Rabbit Anti-CD4/PE-CY7 Conjugated antibody (SL0766R)

Dilution: $1\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG-PE-CY7 .

Protocol

The cells were fixed with 70% ice-cold methanol overnight at 4°C . The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature.Acquisition of

	20,000 events was performed.
--	------------------------------

www.sunlongbiotech.com