



## Rabbit Anti-CD4 antibody

SL0647R

<b>Product Name:</b>	CD4
<b>Chinese Name:</b>	CD4抗体
<b>Alias:</b>	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.
<b>文献引用</b> <b>PubMed</b> :	<p><b>Specific References(2)</b> SL0647R has been referenced in 2 publications.</p> <p><b>[IF=1.03]</b>Smit, Francis Edwin, et al. "Does prolonged post-mortem cold ischemic harvesting time influence cryopreserved pulmonary homograft tissue integrity?." Cell and Tissue Banking: 1-14.<b>IHC-F;Human.</b>  <a href="#">PubMed:25663640</a></p> <p><b>[IF=1.26]</b>Jaime-Ramirez, Alena C., et al. "Reolysin and Histone Deacetylase Inhibition in the Treatment of Head and Neck Squamous Cell Carcinoma." Molecular Therapy-Oncolytics 5 (2017): 87-96.<b>IHC-P;Mouse.</b>  <a href="#">PubMed:0</a></p>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Sheep,Guinea Pig,MACFA
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/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.
<b>Molecular weight:</b>	48kDa
<b>Cellular localization:</b>	The cell membrane

<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human CD4:385-457/457<Cytoplasmic>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<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><b>Function:</b> Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts.</p> <p><b>Subunit:</b> 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> <p><b>Subcellular Location:</b> 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.</p> <p><b>Post-translational modifications:</b> Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.</p> <p><b>Similarity:</b> Contains 3 Ig-like C2-type (immunoglobulin-like) domains.</p>

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.

此抗体可识别55KD I 型单链穿膜glycoprotein。

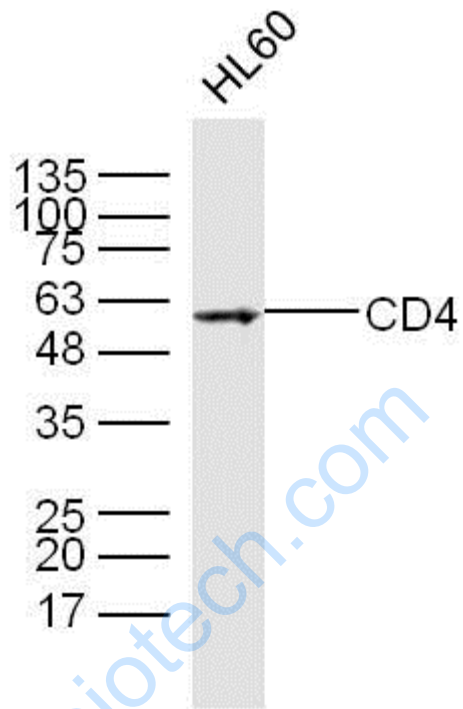
CD4分子是存在于大多数辅助/诱导T细胞表面的59kDa的glycoprotein。正常淋巴组织中CD4的表达数量多于CD8, 此抗体主要用于标记辅助/诱导T细胞, 与CD8单抗联合使用对外周血lymphocyte分型。CD4抗原是HLA-

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抗原具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:

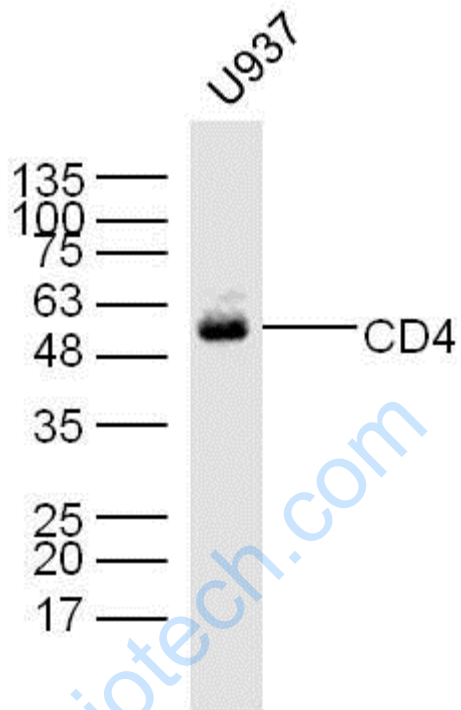
HL60 Cell Lysate at 40 ug

Primary: Anti- CD4 (SL0647R) at 1/300 dilution

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

Predicted band size: 48 kD

Observed band size: 55kD



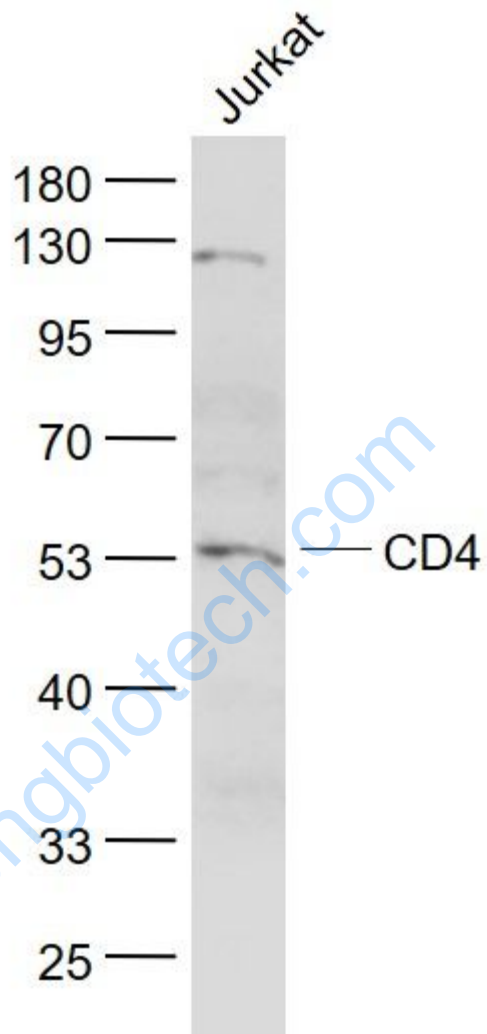
U937 Cell Lysate at 40 ug

Primary: Anti- CD4 (SL0647R) at 1/300 dilution

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

Predicted band size: 48 kD

Observed band size: 55kD



Sample:

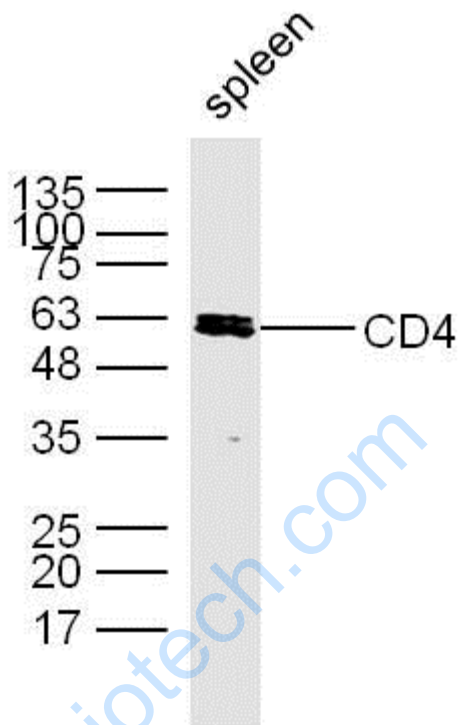
Jurkat(Human) Cell Lysate at 30 ug

Primary: Anti- CD4 (SL0647R) at 1/1000 dilution

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

Predicted band size: 48 kD

Observed band size: 53 kD



Sample:

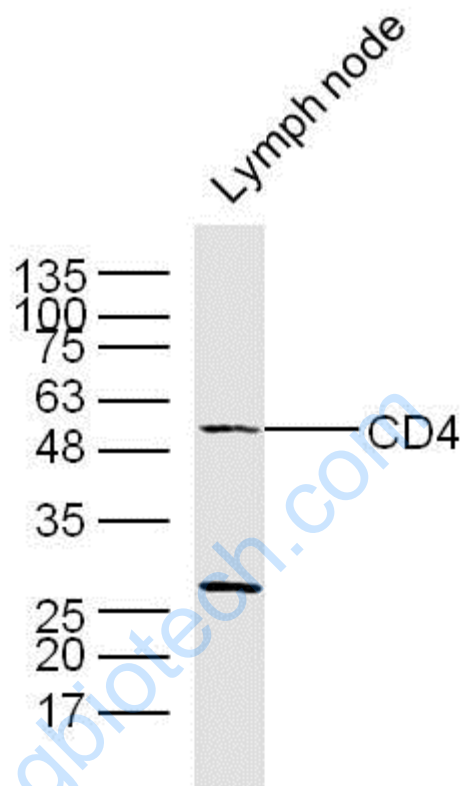
Spleen (Mouse) Lysate at 40 ug

Primary: Anti- CD4 (SL0647R) at 1/300 dilution

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

Predicted band size: 48 kD

Observed band size: 55kD



Sample:

Lymph node(Mouse) Lysate at 40 ug

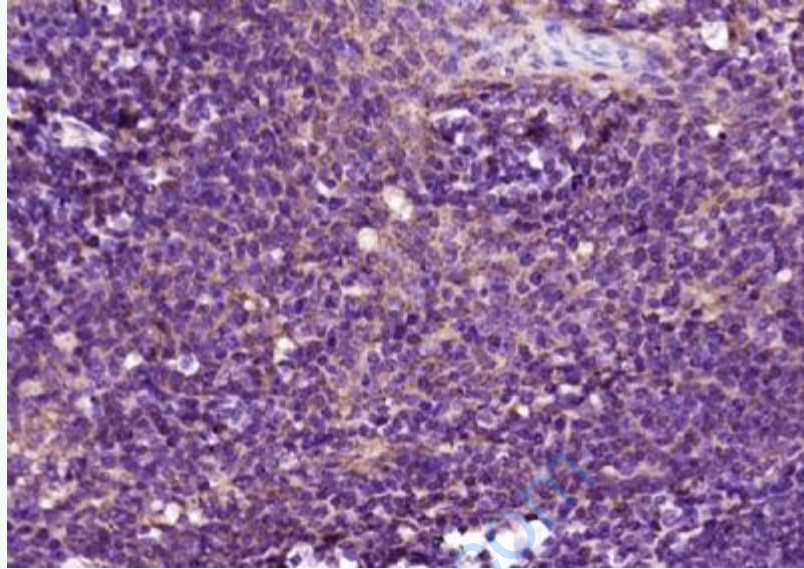
Primary: Anti- CD4 (SL0647R) at 1/300 dilution

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

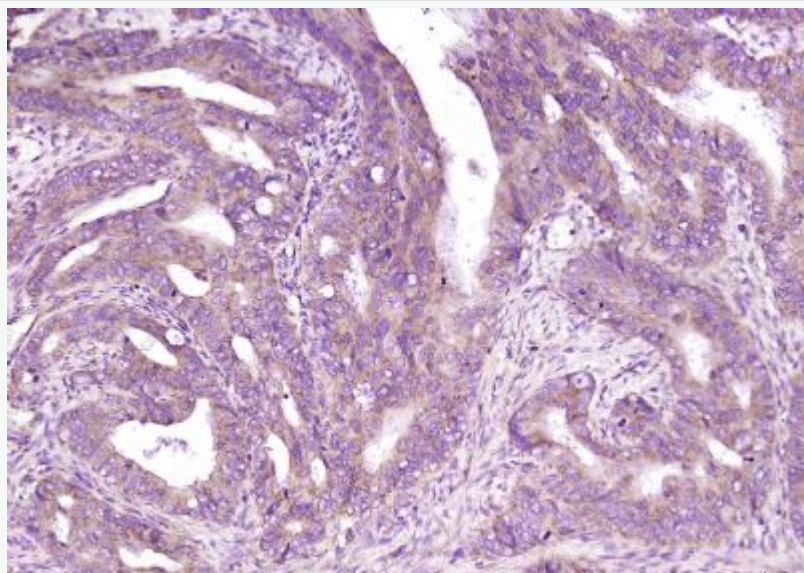
Predicted band size: 48 kD

Observed band size: 55kD

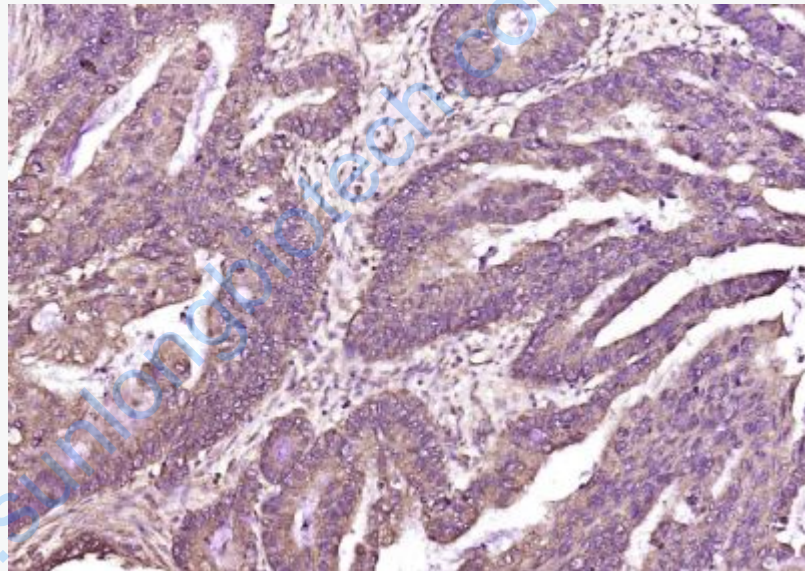




Paraformaldehyde-fixed, paraffin embedded (human tonsil); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD4) Polyclonal Antibody, Unconjugated (SL0647R) at 1:4000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

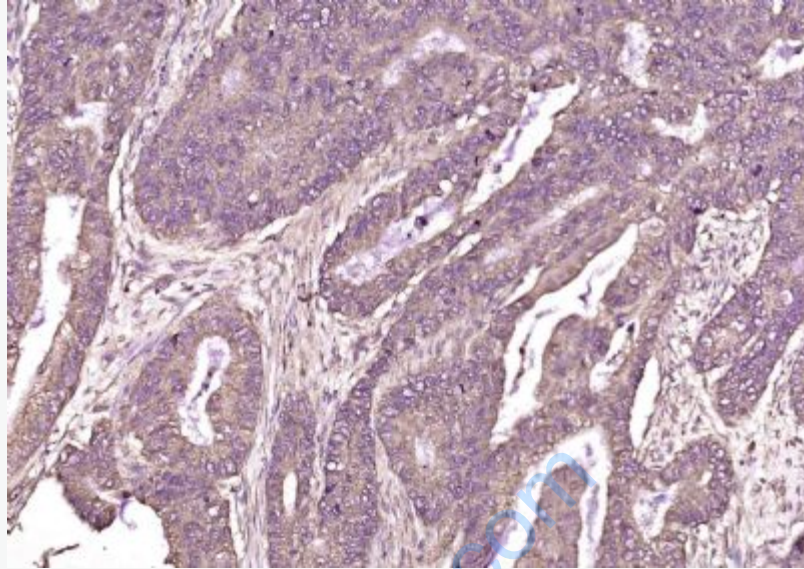


Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD4) Polyclonal Antibody, Unconjugated (SL0647R) at 1:4000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); 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 (SL0647R) at 1:2000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.





Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); 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 (SL0647R) at 1:1000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

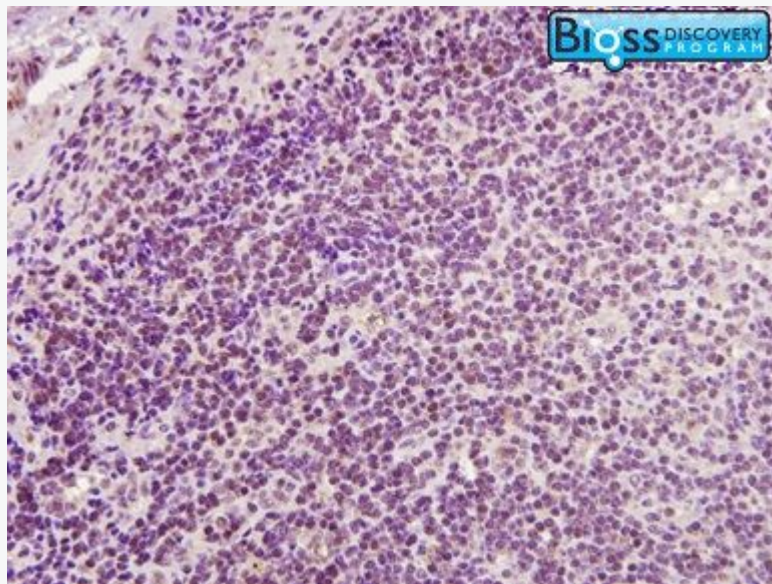
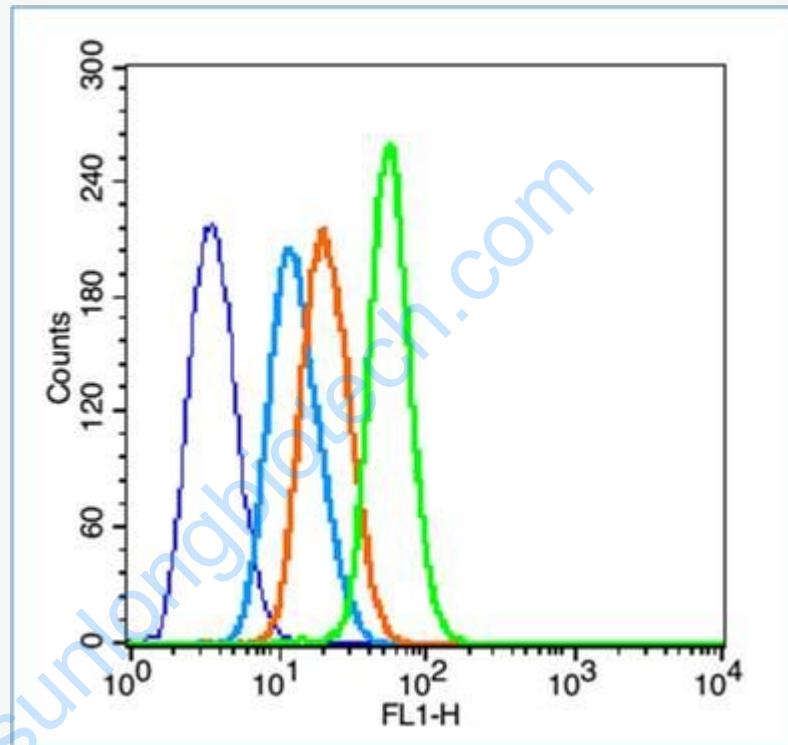


Image was kindly submitted by Dr.David M Burmeister from US Army Institute of Surgical Research. Pig lymph nodes stained with Rabbit Anti-CD4 Polyclonal Antibody(SL0647R)at 1:300 for one hour at room temperature.



Blank control (blue line): HL60 (fixed with 2% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature).

Primary Antibody (green line): Rabbit Anti-CD4 antibody (SL0647R),Dilution:  $1\mu\text{g} / 10^6$  cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC,dilution:  $1\mu\text{g} / \text{test}$ .