

**Goat Anti-CD4 Antibody (internal region)**  
**Purified Goat Polyclonal Antibody**  
**Catalog # AF4218a****Specification**

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**Goat Anti-CD4 Antibody (internal region) - Product Information**

Application	WB
Primary Accession	<a href="#">P01730</a>
Other Accession	<a href="#">NP_000607.1</a> , <a href="#">NP_001181943.1</a>
Reactivity	Human
Predicted	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5
Calculated MW	51111

**Goat Anti-CD4 Antibody (internal region) - Additional Information****Gene ID** 920**Other Names**

CD4; CD4 molecule; CD4mut; CD4 antigen (p55); CD4 receptor; T-cell surface antigen T4/Leu-3; T-cell surface glycoprotein CD4

**Format**

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

**Immunogen**Peptide with sequence C-KNKEVSVKRVTDQPK, from the internal region of the protein sequence according to [NP\\_000607.1](#); [NP\\_001181943.1](#).**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-CD4 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-CD4 Antibody (internal region) - Protein Information****Name** CD4**Function**

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.

**Cellular Location**

Cell membrane; Single-pass type I membrane protein. Note=Localizes to lipid rafts (PubMed:12517957, PubMed:9168119). 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 glycoprotein gp160 that interacts with, and sequesters CD4 in the endoplasmic reticulum

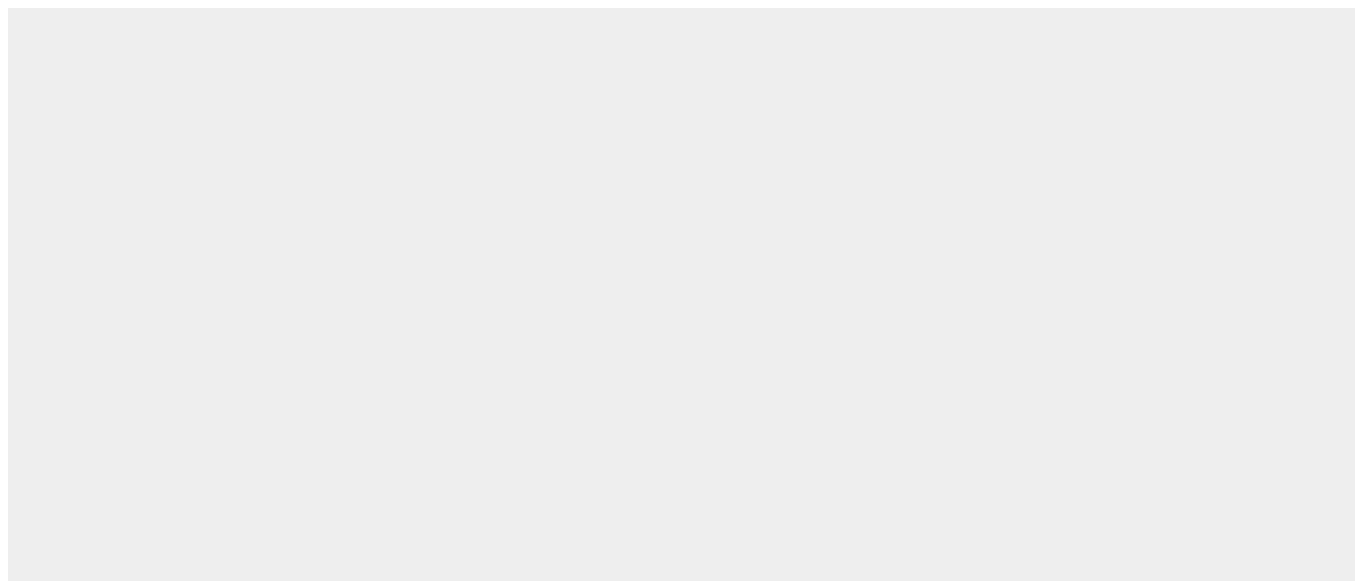
**Tissue Location**

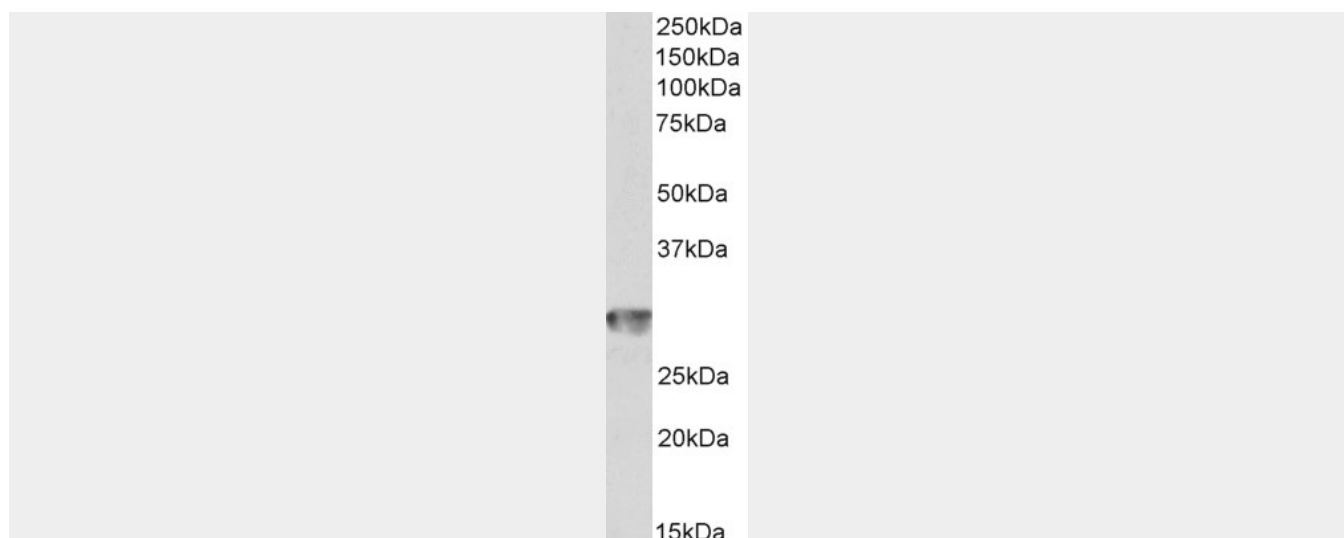
Highly expressed in T-helper cells. The presence of CD4 is a hallmark of T-helper cells which are specialized in the activation and growth of cytotoxic T-cells, regulation of B cells, or activation of phagocytes. CD4 is also present in other immune cells such as macrophages, dendritic cells or NK cells

**Goat Anti-CD4 Antibody (internal region) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-CD4 Antibody (internal region) - Images**



AF4218a (1  $\mu$ g/ml) staining of Human Spleen lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### **Goat Anti-CD4 Antibody (internal region) - References**

CD4 expression on activated NK cells: ligation of CD4 induces cytokine expression and cell migration. Bernstein HB, Plasterer MC, Schiff SE, Kitchen CM, Kitchen S, Zack JA. Journal of immunology (Baltimore, Md. : 1950) 2006 Sep 177 (6): 3669-76.