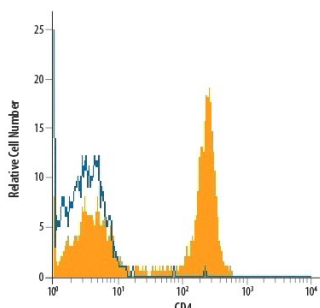
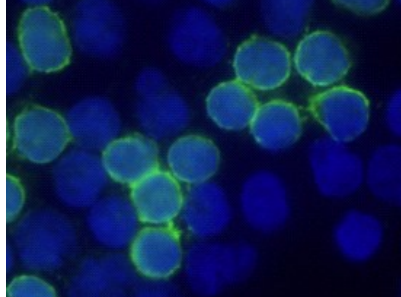


DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human CD4 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse CD4, recombinant feline CD4, recombinant cotton rat CD4, and recombinant canine CD4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human CD4 Lys26-Trp390 Accession # P01730
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS		
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Flow Cytometry	5 µL/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA	
<p>Flow Cytometry</p>  <p>Detection of CD4 in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Goat Anti-Human CD4 Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB8165G, filled histogram) or isotype control antibody (Catalog # IC108G, open histogram). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Immunocytochemistry</p>  <p>CD4 in Human PBMCs. CD4 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Goat Anti-Human CD4 Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB8165G, green) at 10 µg/mL for 3 hours at room temperature. Cells were counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>

PREPARATION AND STORAGE	
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

CD4 is an approximately 55 kDa type I membrane glycoprotein that is expressed predominantly on most thymocytes and a subset of mature T lymphocytes. In humans, CD4 is also expressed to a lesser extent on monocytes and macrophage related cells. Human CD4 cDNA encodes a 458 amino acid (aa) residue precursor protein with a 25 aa residue signal peptide, a 371 aa residue extracellular region containing four immunoglobulin homology domains, a 24 aa residue transmembrane domain and a 38 aa residue cytoplasmic domain. CD4 is a coreceptor required for T cell recognition of antigens that are presented by class II major histocompatibility complexes. CD4 has been shown to be a coreceptor of HIV entry and specifically binds gp120, the external envelope glycoprotein of HIV.

References:

1. Capon, D.I. *et al.* (1991) *Annu. Rev. Immunol.* **9**:649.

PRODUCT SPECIFIC NOTICES

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