

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CD4 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse CD4 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 34930
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human CD4 Extracellular domain
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2 mg/mL 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. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Human whole blood lymphocytes

## PREPARATION AND STORAGE

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

## 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) precursor protein with a 25 aa signal peptide, a 371 aa extracellular region containing four immunoglobulin homology domains, a 24 aa transmembrane domain and a 38 aa 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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