

**DESCRIPTION**

<b>Species Reactivity</b>	Cotton Rat
<b>Specificity</b>	Detects cotton rat CD4 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant CD4 from human, mouse, rat, cat, or dog is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 695542
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant cotton rat CD4 Lys26-Pro393
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Cotton rat splenocytes

**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 transmembrane glycoprotein that is expressed predominantly on thymocytes and the Th1, Th2, Th17, Tfh, and Treg subsets of mature T lymphocytes. In human, CD4 is additionally expressed on macrophages, neutrophils, monocytes, NK cells, and neurons and glial cells in the brain. CD4 binding to MHC class II molecules on antigen presenting cells contributes to the formation of the immunological synapse. CD4 also functions as a chemotactic receptor for IL-16 and, in human, as a coreceptor for the gp120 surface glycoprotein of HIV-1.

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