

**DESCRIPTION**

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Recognizes mouse CD4 (1-3).
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # GK1.5
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse CTL clone V4
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

**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>	2.5 µg/10 <sup>6</sup> cells	Mouse splenocytes
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below
<b>Immunohistochemistry</b>	Ledbetter, J.A. <i>et al.</i> (1980) <i>J. Exp. Med.</i> <b>152</b> :280., Zheng, B.S. <i>et al.</i> (1996) <i>J. Exp. Med.</i> <b>184</b> :1083.	

**DATA**

**Immunocytochemistry**

**CD4 in Mouse Splenocytes.** CD4 was detected in immersion fixed mouse splenocytes using Rat Anti-Mouse CD4 Biotinylated Monoclonal Antibody (Catalog # BAM554) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to plasma membranes. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

CD4 is a type I membrane glycoprotein belonging to the immunoglobulin superfamily. It is expressed predominantly on thymocytes and a subset of mature T lymphocytes. CD4 functions in collaboration with the T cell receptor in the recognition of peptide antigens that are presented by class II major histocompatibility complexes. CD4 also has been shown to be a coreceptor of HIV entry and specifically binds gp120, the external envelope glycoprotein of HIV.

**References:**

1. Dialynas, D.P. *et al.* (1983) *J. Immunol.* **131**:2445.
2. Dialynas, D.P. *et al.* (1983) *Immunol. Rev.* **74**:29.
3. Bendelac, A. (1995) *Curr. Opin. Immunol.* **7**:367.