

DESCRIPTION

Species Reactivity	Mouse
Specificity	Reacts with mouse CD4, an antigen co-receptor on the T cell surface which interacts with MHC II molecules on antigen presenting cells.
Source	Monoclonal Rat IgG _{2B} Clone # GK1.5
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse CTL clone V4
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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
Flow Cytometry	2.5 µg/10 ⁶ cells	Mouse splenocytes
Cell Depletion	Dialynas, D.P. <i>et al.</i> (1983) <i>Immunol. Rev.</i> 74 :29; Martin, P. <i>et al.</i> (2000) <i>Blood</i> 96 :2511.	
Costimulation of T Cells	Bosselut, R. <i>et al.</i> (1999) <i>J. Exp. Med.</i> 190 :1517.	
Immunohistochemistry	Ledbetter, J.A. <i>et al.</i> (1980) <i>J. Exp. Med.</i> 152 :280; Zheng, B.S. <i>et al.</i> (1996) <i>J. Exp. Med.</i> 184 :1083.	
Immunoprecipitation	Dialynas, D.P. <i>et al.</i> (1983) <i>J. Immunol.</i> 131 :2445.	
Inhibition of T Cell Function	Dialynas, D.P. <i>et al.</i> (1983) <i>J. Immunol.</i> 131 :2445; Dialynas, D.P. <i>et al.</i> (1983) <i>Immunol. Rev.</i> 74 :29; Kruman, I.I. <i>et al.</i> (1996) <i>Cell. Immunol.</i> 173 :236; Grakoui, A. <i>et al.</i> (1999) <i>Science</i> 285 :221.	

PREPARATION AND STORAGE

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

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.