

PERFORMANCE DATA SHEET

1916

Monoclonal anti-mouse CD4/Biotin*

mAb name/Clone: GK1.5

Isotype: Rat IgG2bk

Immunogen: Mouse CTL-V4 membrane prep

CATALOG#: 704-030

QUANTITY: 100 µg

CONCENTRATION: 1.0 mg/ml

INFORMATION: Antibody GK1.5 binds to an extracellular epitope of the 55kd CD4 molecule present on a murine T cell subset (1,2). CD4 binds to MHC Class II expressed by antigen presenting cells, facilitating T Cell Receptor signaling. This clone has proven effective as a T cell depletion reagent(3).

References: 1) Wilde DB, Fitch FW, et al. (1983) *J Immunol* **131**(5):2178-2183. 2) Dialynas DP, Fitch FW, et al. (1983) *J Immunol* **131**(5):2445-2451. 3) Mochimaru H, Ishida S, et al. (2008) *Invest Ophthalmol Vis Sci* **49**(5):2172-2177.

STORAGE CONDITIONS: Store at 2 - 5°C. Freeze/thawing not recommended.

PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: _____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Antibody from (low FBS containing) tissue culture supernatant was Protein G purified and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

PERFORMANCE: Reagent was tested for binding to ACK lysed murine splenocytes in FACS. Five x 10⁵ splenocytes per tube were washed and pre incubated 5 minutes with 20 µl of 250 µg/ml Mouse IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 ul of anti-mouse CD4/Biotin at concentration of 1 µg/ml. They were then washed twice and incubated with 2^o reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed twice, fixed and analyzed by FACS. A 24% sub population of the cells stained positive with a mean shift of 1.78 log10 fluorescent units when compared to an Isotype control Mouse IgG1/Biotin (catalog #278-010). Binding was blocked when cells were pre incubated with 20µl of 0.5mg/ml unlabeled anti-CD4 antibody (cat #704-020).

***Research use only. Not for use in Diagnostic Procedures.**

Binding of anti-Mouse CD4/Biotin + SA/PE to RBC-lysed Splenocytes

