

## 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% NaN<sub>3</sub> (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 10<sup>5</sup> 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<sup>o</sup> 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** log<sub>10</sub> 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).

*\*This Product is intended for Laboratory Research use only.*

