

## PERFORMANCE DATA SHEET

1916

### Monoclonal anti-mouse CD3 $\epsilon$ /Biotin\*

**mAb name/Clone:** 145-2C11

**Isotype:** IgG

**Immunogen:** Mouse BM10-37 T cell membrane prep

**CATALOG#:** 703-030

**QUANTITY:** 100  $\mu$ g

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Antibody 145-2C11 binds to an extracellular epitope of the 25 kd CD3 $\epsilon$  molecule present on murine T cells (1). CD3 molecules associate with T cell Receptors and provide intracellular signaling mechanism. Cross linking Cell surface CD3 with soluble or immobilized 145-2C11 can activate this mechanism(2).

**References:** 1) O Leo, J A Bluestone, et al. (1987) *PNAS USA* **84**(5): 1374-1378. 2) L E Samelson, J A Bluestone, et al. (1987) *J Immunol* **139**(8): 2708-2714.

**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  $\mu$ l of 250  $\mu$ g/ml Mouse IgG (to reduce non specific binding) after which they were incubated 45 minutes on ice with 80  $\mu$ l of anti-mouse CD3/Biotin at concentration of 10  $\mu$ g/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 35% sub population of the cells stained positive with a mean shift of 1.34 log<sub>10</sub> fluorescent units when compared to background. Binding was blocked when cells were pre incubated with 20 $\mu$ l of 0.5mg/ml unlabeled anti-CD3 antibody (cat #703-020).

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

**Binding of anti-Mouse CD3/Biotin + SA/PE to RBC-lysed Splenocytes**

