

# PERFORMANCE DATA SHEET

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## Monoclonal anti-human TCR C $\beta$ /Biotin\*

**mAb name/Clone:** JOVI-1

**Isotype:** Mouse IgG2ak

**Immunogen:** Human HA1.7 TCR  $\beta$  chain expressed on transgenic mouse cells

**CATALOG#:** 101-030

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

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human T cell receptor (TCR) is a T cell surface expressed heterodimer of  $\alpha/\beta$  or  $\gamma/\delta$  chains. TCR's recognize antigen peptides bound to MHC molecules forming the basis of antigen specific response by T cells.

Antibody JOVI-1 recognizes human C $\beta$ 1 TCR gene product and reacts with 50-75% of T cells in normal human blood. Antibody JOVI-1 is mitogenic for T cells expressing TCR C $\beta$ 1.

**References:** J.L. Viney, et al, (1992) Hybridoma **11**: 701-713. A. Weiss, (1993) Cell **73**: 209-212. M.M. Daris, (1995) Nature **375**: 104. S. Valitutti, et al, (1995) Nature **375**: 148-151.

**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: \_\_\_\_\_

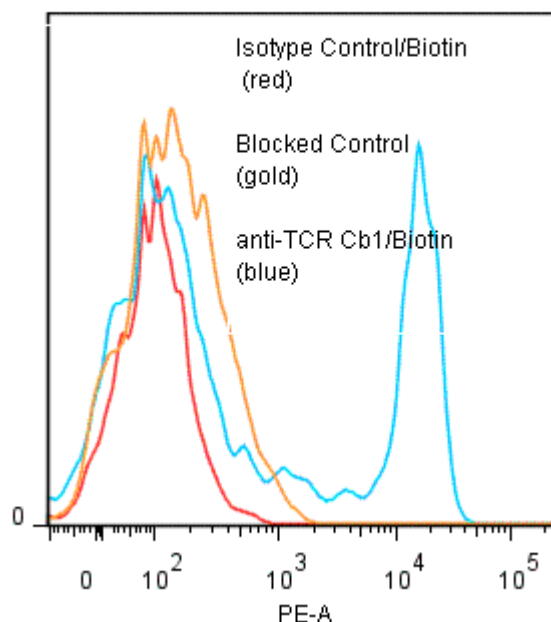
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin), and reacted with NHS-Biotin.

Unconjugated Biotin was removed from conjugate using a desalting column.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared human PBMC were washed and pre incubated 10 minutes with 20  $\mu$ l of 300 $\mu$ g/ml human IgG (to reduce non specific binding) after which they were incubated 45 minutes on ice with 80  $\mu$ l anti-TCR C $\beta$ 1/Biotin at 5  $\mu$ g/ml. Cells were washed twice and incubated with 50  $\mu$ l of 2<sup>o</sup> reagent SA/PE after which they were washed three times, fixed and analyzed by FACS. A **34% sub population** of the cells stained positive with a mean shift of 2.09 log<sub>10</sub> fluorescent units when compared to a Mouse IgG2a/Biotin negative control (Catalog # 281-030). Binding was blocked when cells were pre incubated 10 minutes with 20  $\mu$ l of 0.5 mg/ml anti-TCR C $\beta$ 1 antibody (Catalog #101-020).

### Binding of anti-TCR C $\beta$ 1/Biotin +SA/PE to human PBL



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