

PERFORMANCE DATA SHEET

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Monoclonal anti-human TCR C β 1/Biotin*

mAb name/Clone: JOVI-1

Isotype: Mouse IgG2a κ

Immunogen: Human HA1.7 TCR β chain expressed on transgenic mouse cells

CATALOG#: 101-030

QUANTITY: 100 μ g

CONCENTRATION: 1.0 mg/ml

INFORMATION: Human T cell receptor (TCR) is a T cell surface expressed heterodimer of α/β or γ/δ 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 β 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 β 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% NaN₃ (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 10⁵ ficoll prepared human **PBMC** per tube were washed and pre incubated 5 minutes with 20 μ l human IgG at 250 μ g/ml (to block non specific binding) after which they were incubated 45 minutes on ice with 80 μ l anti-TCR C β 1/Biotin at 10 μ g/ml. Cells were washed twice and incubated with 50 μ l of 2^o reagent SA/PE after which they were washed three times, fixed and analyzed by FACS. A net **51%** sub population of the cells stained positive with a mean shift of **2.1 log₁₀** 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 μ l of 0.5 mg/ml anti-TCR C β 1 antibody (Catalog #101-020).

* **Research Use Only. Not for use in Diagnostic procedures.**

Binding of anti-TCR C β 1/Biotin +SA/PE to human Jurkat

