

PERFORMANCE DATA SHEET

3405

Monoclonal anti-human TCR C β 1/FITC*

mAb name/Clone: JOVI-1

Isotype: Mouse IgG2a

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

CATALOG#: 101-040

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6 μ l of concentrated stock per 5×10^5 -cell test)

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 is not recommended. Protect from light.**

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% Immunoglobulin by SDS-PAGE, and reacted with FITC.

Unconjugated FITC was removed from conjugate using a desalting column. Antibody conjugate is at **0.5 mg/ml** with a fluorescein: antibody molar ratio of 5.8.

PERFORMANCE: Five $\times 10^5$ 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/FITC at a 1:50 dilution (10 μ g/ml). Cells were washed three times, fixed and analyzed by FACS using a lymphoid gate. A net **29%** sub population of the cells stained positive with a mean shift of **1.30 log₁₀** fluorescent units when compared to a Mouse IgG2a/FITC negative control (Catalog #281-040). Binding was blocked when cells were pre incubated with 20 μ l of 0.5mg/ml unlabeled anti-TCR C β 1 antibody (cat #101-020).

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

Binding of anti-TCR C β 1/FITC to human PBL

