

**PERFORMANCE DATA SHEET**

2733

**Monoclonal anti-human TCR C beta 1/APC\***

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

**Isotype:** Mouse IgG2a

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

**CATALOG#:** 101-060

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2 ml

**WORKING DILUTION:** 1:50 (or use 1.6µl of concentrated stock per 5 x 10<sup>5</sup>-cell test)

**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. Do not freeze! Protect from light.

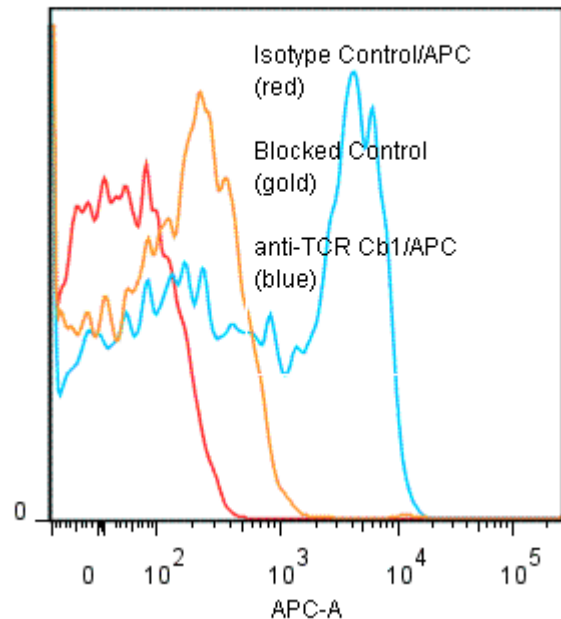
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was conjugated to cross-linked Allophycocyanin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at approximately **0.25 mg/ml** with an A<sub>650</sub>/A<sub>280</sub> ratio of 2.06.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared human peripheral blood mononuclear cells were washed and pre incubated 45 minutes on ice with 20 ul of 300 ug/ml human IgG (to reduce non specific binding) after which they were incubated with 80 ul of anti-TCR Cβ1/APC at a 1:50 dilution (5µg/ml). Cells were washed three times, fixed and analyzed by FACS using a lymphoid gate. A 44% subpopulation of the cells stained positive with a mean shift of 1.99 log<sub>10</sub> fluorescent units when compared to a Mouse IgG2a/APC isotype control (Catalog #281-060). Binding was blocked when cells were pre incubated with 20 ul of 0.5 mg/ml anti-TCR Cβ1 antibody (Cat# 101-020).

**Binding of anti-TCR Cβ1/APC to human PBL**



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