

# PERFORMANCE DATA SHEET

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## Monoclonal anti-human CD137 (4-1BB)/FITC \*

**mAb name/Clone:** 4B4-1

**Isotype:** Mouse IgG1κ

**Immunogen:** Ectodomain of human 4-1BB-GST fusion protein

**CATALOG#:** 360-040

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2ml

**WORKING DILUTION:** 1:50 (or use 1.6ul concentrated stock per test)

**INFORMATION:** Human CD137 (4-1BB) is expressed on activated T cells within 24-48 hours of activation. CD137 is a type I membrane protein and a member of the tumor necrosis factor receptor superfamily. CD137 appears to be important for T cell proliferation and survival. Antibody 4B4-1 recognizes the CD137 molecule of about 35 kd from activated T cells.

**References:** M.R. Alderson, et al, (1994) Eur J Immunol **24**: 2219-2227. H.J. Gruss, and S.K. Dower, (1995) Blood **85**: 3378-3404. B.A. Garni-Wagner, et al, (1996) Cellular Immunol **169**: 91-98. H. Schwarz, et al, (1996) Blood **87**: 2839-2845.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Freeze/Thawing is not recommended. Protect from light.

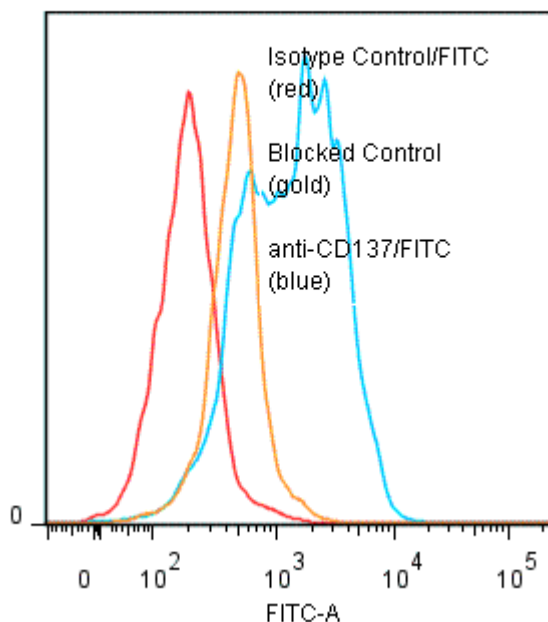
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

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

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was reacted with FITC. Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC conjugate is at **0.5 mg/ml** with a Fluorescein/IgG molar ratio of 6.5.

**PERFORMANCE:** Cultured human CEM cells were stimulated 1 day in the presence of PMA (10ng/ml) and ionomycin (1μM). Five x 10<sup>5</sup> cells were washed and incubated 45 minutes on ice with 80 μl of anti-CD137/FITC at a **1:50** dilution factor (10 ug/ml). Cells were washed three times, fixed and analyzed by FACS. A 25% sub population of the cells stained positive with a mean shift of **0.92 log<sub>10</sub>** fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog # 278-040). Binding was blocked when cells were pre incubated 10 minutes with 20 μl of 0.5 mg/ml anti-CD137 antibody (Catalog #360-020)

**Binding of anti-CD137/FITC to stimulated human CEM cells**



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