PERFORMANCE DATA SHEET

3206



CONCENTRATION: 1.0 mg/ml

Monoclonal anti-human CD137 (4-1BB) Fab monomer*

mAb name/Clone: **4B4-1** *Isotype:* Mouse IgG1κ

Immunogen: Ectodomain of human 4-1BB fusion protein s

CATALOG#: 360-580 QUANTITY: 100 μg

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 $2 - 5^{\circ}C$. Open under aseptic conditions. Freeze/Thawing is 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. Product was sterile filtered and vialed under aseptic conditions. **No preservative added.**

PRODUCTION: Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Immunoglobulin was enzymaticly cleaved using Immobilized Ficin. Fab was separated from intact antibody, F(ab')₂ and Fc fragments by Protein A and Size exclusion chromatography. No intact antibody was observed by SDS-PAGE.

PERFORMANCE: Ficoll prepared human **peripheral blood lymphocytes** were stimulated overnight in culture with 10 ng/ml PMA and 1mM Ionomicin. Five x 10^5 cells per tube were washed and incubated 45 minutes on ice with 80 μ l of anti-CD137 Fab at 10 μ g/ml. Cells were washed twice and incubated with 2^o reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of $0.66 \log_{10}$ fluorescent units when compared to a Mouse IgG1 Fab negative control (Catalog #278-580).

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