

Monoclonal anti-human CD137 (4-1BB) F(ab')₂*

mAb name/Clone: 4B4-1

Isotype: Mouse IgG1κ

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

CATALOG#: 360-520

QUANTITY: 100 µg

CONCENTRATION: 1.0 mg/ml

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. Gani-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. *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 vialled under aseptic conditions. **No preservative added.**

PRODUCTION: Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Immunoglobulin was enzymatically cleaved using Immobilized Ficin. F(ab')₂ was separated from intact antibody 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 Ionomycin. Five x 10⁵ cells per tube were washed and incubated 45 minutes on ice with 80 µl of anti-CD137 F(ab')₂ at **5 µg/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 **0.75 log₁₀** fluorescent units when compared to a Mouse IgG1 F(ab')₂ negative control (Catalog #278-520).

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

**Binding of anti-CD137 F(ab')₂
+GAM/FITC to stimulated human PBL**

