

PERFORMANCE DATA SHEET

3012

Monoclonal anti-human CD16(FcγRIII) Fab*

mAb name/Clone: 3G8

Isotype: Mouse IgG1

Immunogen: Human polymorphonuclear leukocytes

CATALOG#: 165-580

QUANTITY: 100 µg

CONCENTRATION: 1.0 mg/ml

INFORMATION: Human CD16 is a low affinity receptor for complexed IgG and occurs in two distinct forms, as a glycosyl phosphatidyl inositol (GPI) anchored protein in granulocytes, and as an integral membrane protein on NK cells and macrophages. Antibody 3G8 recognizes both allelic forms of CD16. Antibody 3G8 blocks binding of complexed IgG to CD16.

References: H.B. Fleit, et al, (1982) Proc Natl Acad Sci USA **79**: 3275-3279. Leukocyte Typing IV (W. Knapp, et al, eds.) Oxford University Press, Oxford, (1989) p. 574-597. G. Trinchieri & N. Valiante, (1993) Natural Immunity **12**: 218-234. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 805-814. J.C. Edberg & R.P. Kimberly, (1997) J Immunol **159**: 3849-3857.

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. Fab monomer 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: Five x 10⁵ ficoll prepared human peripheral blood mononuclear cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD16 Fab diluted to 10 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. A net 4.9 % sub population of the cells stained positive with a mean shift of 1.48 log₁₀ fluorescent units when compared to a Mouse IgG1 Fab Isotype control (Catalog #278-580).

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

Binding of anti-CD16 Fab monomer +GAM/FITC to human PBMC

