

PERFORMANCE DATA SHEET

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Monoclonal anti-human CD16(FcγRIII)-Fab/Biotin*

mAb name/Clone: 3G8

Isotype: Mouse IgG1 (Fab monomer)

Immunogen: Human polymorphonuclear leukocytes

CATALOG#: 165-530

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. Freeze/thawing 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, 5% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Purified Antibody from (low FBS containing) tissue culture supernatant. Immunoglobulin was enzymatically cleaved using Ficin. Fab monomer was separated from intact antibody and Fc fragments by Protein A and Size exclusion chromatography, and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

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/Biotin at 10 µg/ml. Cells were washed twice and incubated with 2^o reagent Streptavidin/R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. A net 10.1% sub population of the cells stained positive with a mean shift of 1.4 log₁₀ fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD16 antibody (Catalog #165-020).

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

Binding of anti-CD16-Fab/Biotin +SA/PE to human PBMC

