

PERFORMANCE DATA SHEET

1746

Monoclonal anti-human CD16(FcγRIII)/Biotin*

mAb name/Clone: 3G8

Isotype: Mouse IgG1

Immunogen: Human polymorphonuclear leukocytes

CATALOG#: 165-030

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: Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin), 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/Biotin at **5 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 **19%** sub population of the cells stained positive with a mean shift of **2.4 log₁₀** fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD16 antibody (Catalog #165-020).

**This Product is intended for Laboratory Research use only.*

Binding of anti-CD16/Biotin to human cell types

