

PERFORMANCE DATA SHEET

1422

Monoclonal anti-human CD16(Fc γ RIII)/R-PE *

mAb name/Clone: 3G8

Isotype: Mouse IgG1

Immunogen: Human polymorphonuclear leukocytes

CATALOG#: 165-050

QUANTITY: 120 tests

VOLUME IN VIAL: 200 μ l

WORKING DILUTION: 1:50 (or use 1.6 μ l of concentrated reagent per 5x10⁵-cell test)

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. Do not freeze! Protect from light.*

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, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at **0.5 mg/ml** with an A₅₆₅/A₂₈₀ ratio of 3.03.

PERFORMANCE: Five x 10⁵ ficoll prepared human **peripheral blood lymphocytes** were washed and incubated 45 minutes on ice with 80 μ l of anti-CD16/R-PE at a **1:50** dilution(10 μ g/ml). Cells were washed three times, fixed and analyzed by FACS. A net **25%** sub population of the cells stained positive with a mean shift of **2.1** log₁₀ fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog # 278-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μ l of 0.5 mg/ml anti-CD16 antibody (Catalog #165-020).

***This Product is intended for Laboratory Research use only.** R-Phycoerythrin (R-PE) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.