

PERFORMANCE DATA SHEET

2620

Monoclonal anti-human CD64 (FcγRI)/Biotin*

mAb name/Clone: 10.1

Isotype: Mouse IgG1

Immunogen: Human rheumatoid synovial fluid cells/ monocytes

CATALOG#: 216-030

QUANTITY: 100 µg

CONCENTRATION: 1.0 mg/ml

INFORMATION: Human CD64 is a high affinity receptor for monomeric human IgG1 and IgG3 which is expressed on macrophages, monocytes, and gamma interferon induced neutrophils. CD64 plays an important role in clearance of immune complexes and in antibody dependent cytotoxicity. Antibody 10.1 recognizes the CD64 molecule of 72 kd from gene FcγRIA. Antibody 10.1 blocks binding of FcγRI to immunoglobulin opsonized cells.

Reference: G.J. Dougherty, et al, (1987) Eur J Immunol **17:** 1453-1459. Y. Jayaram, et al, (1989) Clin Exp Immunol **75:** 414-420. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 874-875. D.L. Durden, et al, (1995) J Immunol **154:** 4039-4047. L.L. Marnell, et al, (1995) J Immunol **155:** 2185-2193.

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% Na₃N (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 cultured U-937 cells were pre incubated 10 minutes with 20ul of 300ug/ml human IgG (to reduce non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-CD64/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. Cells stained positive with a mean shift of 1.42 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-CD64 antibody (Catalog #216-020).

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

Binding of anti-CD64/Biotin +SA/PE to human U-937 cells

