

PERFORMANCE DATA SHEET

2726

Monoclonal anti-human CD64 (FcγRI)/R-PE*

mAb name/Clone: 10.1

Isotype: Mouse IgG1

Immunogen: Human rheumatoid synovial fluid cells/monocytes

CATALOG#: 216-050

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6μl of concentrated stock per 5 x 10⁵-cell test)

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 FcγRI. Antibody 10.1 blocks binding of FcγRI to immunoglobulin opsonized cells.

References: 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. 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 2.5.

PERFORMANCE: Five x 10⁵ cultured U-937 cells were washed and incubated 45 minutes on ice with 80 μl of anti-CD64/R-PE at a 1:50 dilution factor (10 μg/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.07 log₁₀ fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog #278-050). Binding was blocked when cells were pre incubated 10 minutes with 20μl of 0.5mg/ml anti-CD64 antibody (Catalog #216-020).

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

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

