

PERFORMANCE DATA SHEET

1746

Monoclonal anti-human CD14/R-PE*

mAb name/Clone: UCHM1

Isotype: Mouse IgG2a κ

Immunogen: Human monocytes

CATALOG#: 163-050

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

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

INFORMATION: Human CD14 is strongly expressed on myelomonocyte lineage cells including monocytes, macrophages, and a subset of granulocytes. CD14 is a high affinity receptor for complexes of lipopolysaccharide and lipopolysaccharide binding protein. A soluble form of CD14 also binds to LPS and LBP. Antibody UCHM1 recognizes a membrane bound CD14 molecule of about 53 kd. UCHM1 will also immunoprecipitate a soluble form of CD14.

References: N. Hogg, et al, (1984) Immunology **53**: 753-767. M.O. Labeta, et al, (1993) Eur J Immunol **23**: 2144-2151.

Leukocyte Typing IV (W. Knapp, et al, eds.) Oxford University Press, Oxford, (1989) "Reference Antibody".

Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 778-788.

S.D. Wright, (1995) J Immunol **155**: 6-8.

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 0.25 mg/ml with an A₅₆₅/A₂₈₀ ratio of 3.2.

PERFORMANCE: Five x 10⁵ ficoll prepared human peripheral white blood cells were washed and pre incubated 5 minutes with 20 μ l human IgG at 250 μ g/ml (to block non specific binding) after which they were incubated 45 minutes on ice with 80 μ l of anti-CD14/R-PE at a 1:50 dilution factor (5 μ g/ml). Cells were washed three times, fixed and analyzed by FACS. A net 6.6% subpopulation of the cells stained positive with a mean shift of 2.45 log₁₀ fluorescent units when compared to a Mouse IgG2a/R-PE negative control (Catalog #281-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μ l of 0.5 mg/ml anti-CD14 antibody (Catalog #163-020).

**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.

Binding of anti-CD14/PE to human cell lines

