Monoclonal Antibody to CD14
Fluorescein (FITC) conjugated (100 tests)

Clone: MEM-15
Isotype: Mouse IgG1

Specificity: The antibody MEM-15 reacts with CD14, a 53-55 kDa GPI (glycosylphosphatidylinositol)-linked membrane glycoprotein expressed on monocytes, macrophages and weakly on granulocytes; also expressed by most tissue macrophages.

The antibody MEM-15 also reacts with soluble forms of CD14 found in serum and in the urine of some nephrotic patients.

HLDA III; WS Code M 252
HLDA IV; WS Code M 113
HLDA IV; WS Code NL 90
HLDA IV; WS Code T 53
HLDA V; WS Code M MA086
HLDA VI; WS Code M MA94

Regulatory Status: RUO

Immunogen: A crude mixture of human urinary proteins precipitated by ammonium sulphate from the urine of a patient suffering from proteinuria.

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

Expiration: See vial label
Lot Number: See vial label

Background: CD14 is a 55 kDa GPI-anchored glycoprotein, constitutively expressed on the surface of mature monocytes, macrophages, and neutrophils, where serves as a multifunctional lipopolysaccharide receptor; it is also released to the serum both as a secreted and enzymatically cleaved GPI-anchored form. CD14 binds lipopolysaccharide molecule in a reaction catalyzed by lipopolysaccharide-binding protein (LBP), an acute phase serum protein. The soluble sCD14 is able to discriminate slight structural differences between lipopolysaccharides and is important for neutralization of serum allochthonous lipopolysaccharides by reconstituted lipoprotein particles. CD14 affects allergic, inflammatory and infectious processes.
References:


*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).


