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Monoclonal Antibody to CD14 - FITC

Alternate names: Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein

Catalog No.: SM3009F

Quantity: 100 Tests

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.

Uniprot ID: P08571

NCBI: 9606

Host / Isotype: Mouse / IgG1

Clone: MEM-18

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

Format: **State:** Liquid purified Ig fraction (› 95 % by PAGE)
Buffer System: PBS pH 7.4 containing 15 mM Sodium Azide as preservative and 0.2% (w/v) high-grade BSA (Protease free) as stabilizer
Label: FITC – Fluorescein isothiocyanate Free of unconjugated and adjusted for direct use

Applications: Flow Cytometry: Analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10e6 cells in a suspension.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody (MEM-18) 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. In human, the epitope recognized by MEM-18 is located between amino acids 57-64.
Species: Human, Non-Human Primates.
Other species not tested.

Storage: Store the antibody in the dark at 2-8°C.
Do Not Freeze.
Avoid prolonged exposure to light.
Shelf life: One year from despatch.

General References: 1. Juan TS, Hailman E, Kelley MJ, Wright SD, Lichenstein HS: Identification of a domain in soluble CD14 essential for lipopolysaccharide (LPS) signaling but not LPS binding. J Biol Chem. 1995 Jul 21;270(29):17237-42.
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