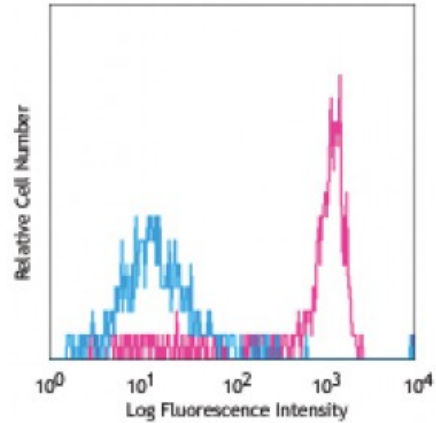


Biotin anti-human CD14

Catalog # / Size: 2109130 / 100 µg
Clone: M5E2
Isotype: Mouse IgG2a, κ
Immunogen: Full-length human CD14 protein
Reactivity: Human
Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Workshop Number: III 329
Concentration: 0.5



Human peripheral blood monocytes stained with biotinylated M5E2, followed by Sav-PE

Applications:

Applications: Flow Cytometry, Immunohistochemistry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤2.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: The M5E2 antibody inhibits monocyte activation and cytokine production induced by LPS. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections, blocking of LPS stimulation⁴, and immunofluorescence microscopy⁵. Clone M5E2 is not recommended for immunohistochemical staining of formalin-fixed paraffin-embedded sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301810).

- Application References:**
1. McMichael A, *et al.* 1987. Leucocyte Typing III. Oxford University Press. New York.
 2. Knapp W, *et al.* Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York.
 3. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
 4. Power CP, *et al.* 2004. *J. Immunol.* 173:5229. (Block)
 5. Williams KC, *et al.* 2001. *J. Exp. Med.* 193:905. (IF)
 6. Iwamoto S, *et al.* 2007. *J. Immunol.* 179:1449. (FC) [PubMed](#)
 7. Santer DM, *et al.* 2010. *J. Immunol.* 485:4739. [PubMed](#)
 8. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

Description: CD14 is a 53-55 kD glycosylphosphatidylinositol (GPI)-linked membrane glycoprotein also known as LPS receptor. CD14 is expressed at high levels on monocytes and macrophages, and at lower levels on granulocytes. Some dendritic cell populations such as interfollicular dendritic cells, reticular dendritic cells, and Langerhans cells have also been reported to express CD14. As a high-affinity receptor for LPS, CD14 is involved in the clearance of gram-negative pathogens, and in the upregulation of adhesion molecules and expression of

cytokines in monocytes and neutrophils.

- Antigen** 1. Stocks S, *et al.* 1990. *Biochem. J.* 268:275.
References: 2. Wright S, *et al.* 1990. *Science* 249:1434.