

Monoclonal Antibody to CD14 - PE

Alternate names:	Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein
Catalog No.:	SM3163R
Quantity:	100 Tests
Background:	CD14 is a 55 kDa GPI-anchored glycoprotein, constitutively expressed on the surface of mature monocytes, macrophages, and neutrophils, where it 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-15
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 Purification: Size-exclusion chromatography Buffer System: PBS containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free BSA as a stabilizing agent Label: PE – R-Phycoerythrin
Applications:	Flow cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10e6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody MEM-15 reacts with CD14 glycoprotein. The antibody also reacts with soluble forms of CD14 found in serum and in the urine of some nephrotic patients. Species: Human, Non-Human Primates. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Shelf life: one year from despatch.

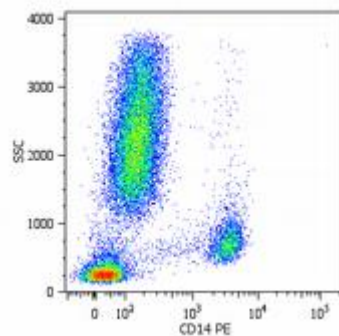
For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

- 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.
 2. Lodrup Carlsen KC, Granum B: Soluble CD14: role in atopic disease and recurrent infections, including otitis media. *Curr Allergy Asthma Rep.* 2007 Nov;7(6):436-43.
 3. Asai Y, Makimura Y, Kawabata A, Ogawa T: Soluble CD14 Discriminates Slight Structural Differences between Lipid As That Lead to Distinct Host Cell Activation. *J Immunol.* 2007 Dec 1;179(11):7674-83.
 4. Fernandez-Real JM, Broch M, Richart C, Vendrell J, Lopez-Bermejo A, Ricart W: CD14 monocyte receptor, involved in the inflammatory cascade, and insulin sensitivity. *J Clin Endocrinol Metab.* 2003 Apr;88(4):1780-4.
 5. Bazil V, Horejsi V, Baudys M, Kristofova H, Strominger JL, Kostka W, Hilgert I.: Biochemical characterization of a soluble form of the 53-kDa monocyte surface antigen. *Eur J Immunol.* 1986 Dec;16(12):1583-9.
 6. Leukocyte Typing III., McMichael A. J. et al (Eds.), Oxford University Press (1987).
 7. Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).
 8. Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
 9. Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
 10. Schiff DE, Rae J, Martin TR, Davis BH, Curnutte JT: Increased phagocyte Fc gammaRI expression and improved Fc gamma-receptor-mediated phagocytosis after in vivo recombinant human interferon-gamma treatment of normal human subjects. *Blood.* 1997 Oct 15;90(8):3187-94.
 11. Sing A, Rost D, Tvardovskaia N, Roggenkamp A, Wiedemann A, Kirschning CJ, Aepfelbacher M, Heesemann J: Yersinia V-antigen exploits toll-like receptor 2 and CD14 for interleukin 10-mediated immunosuppression. *J Exp Med.* 2002 Oct 21;196(8):1017-24.
 12. Funda DP, Tucková L, Farré MA, Iwase T, Moro I, Tlaskalová-Hogenová H: CD14 is expressed and released as soluble CD14 by human intestinal epithelial cells in vitro: lipopolysaccharide activation of epithelial cells revisited. *Infect Immun.* 2001 Jun;69(6):3772-81.

Pictures:



Surface staining of human peripheral blood cells with anti-human CD14 (MEM-15) PE.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com