

## Monoclonal Antibody to CD14 - PE

<b>Alternate names:</b>	Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein
<b>Catalog No.:</b>	SM3009R
<b>Quantity:</b>	100 Tests
<b>Background:</b>	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.
<b>Uniprot ID:</b>	<a href="#">P08571</a>
<b>NCBI:</b>	<a href="#">9606</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	MEM-18
<b>Immunogen:</b>	A crude mixture of human urinary proteins precipitated by ammonium sulphate from the urine of a patient suffering from proteinuria
<b>Format:</b>	<b>State:</b> Liquid Ig fraction <b>Purification:</b> Size-exclusion chromatography <b>Buffer System:</b> Phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent. <b>Label:</b> PE – Conjugated with R-Phycoerythrin under optimum conditions
<b>Applications:</b>	Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl whole blood. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody 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 the antibody is located between amino acids 57-64.
<b>Species Reactivity:</b>	<b>Tested:</b> Human, non-Human Primates
<b>Storage:</b>	Store the antibody 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](http://www.acris-antibodies.com) or on request.

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- General References:**
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Pictures:

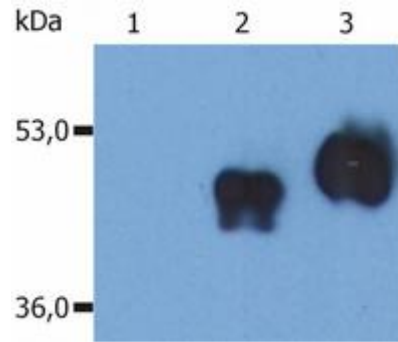


Fig. 1. Western Blotting analysis (non-reducing conditions) of over-expressed human CD14 using anti-CD14 (MEM-18).

Lane 1: whole cell lysate HEK 293 transfected with empty vector;

Lane 2: tissue culture supernatant collected after cultivation of HEK 293 transfected with human CD14 cDNA;

Lane 3: whole cell lysate of HEK 293 transfected with human CD14 cDNA

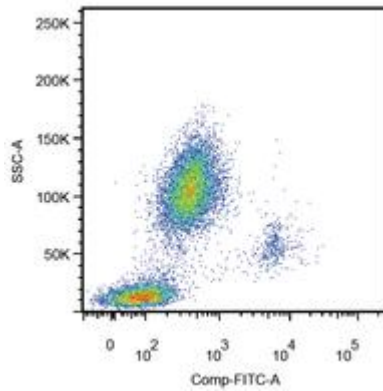


Fig. 2. Surface staining of human peripheral blood leukocytes using anti-human CD14 (clone MEM-18) FITC.

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