

## Product datasheet for SM3009P

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## **CD14 Mouse Monoclonal Antibody [Clone ID: MEM-18]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: MEM-18

**Applications:** ELISA, FC, FN, IP, WB

Recommended Dilution: Flow Cytometry: 4 µg/ml.

Immunoprecipitation.

Western blot (Non-reducing conditions).

ELISA: The antibody MEM-18 has been tested as the detection antibody in a sandwich ELISA

for analysis of Human CD14 in combination with SM3008P (Clone B-A8).

**Functional Assay:** The antibody MEM-18 completely blocks binding of fluorescein (FITC) labeled bacterial LPS to the monocyte surface and it also blocks the binding of CD14 to the

extracellular TLR2 domain.

Reactivity: Human, Primate

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Crude mixture of Human urinary proteins precipitated by Ammonium Sulphate from the

urine of a patient suffering from proteinuria

**Specificity:** 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 MEM-18 is located between amino acids 57-64.

Formulation: Phosphate buffered saline (PBS), pH~7.4 with 15 mM Sodium Azide as preservative

State: Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE)

**Concentration:** lot specific

**Purification:** Protein A Chromatography

**Conjugation:** Unconjugated

**Storage:** Store undiluted at 2-8°C.

DO NOT FREEZE!





**Stability:** Shelf life: one year from despatch.

Gene Name: CD14 molecule

Database Link: Entrez Gene 929 Human

P08571

**Background:** CD14 is a 55 kDa GPI-anchored glycoprotein, constitutively expressed on the surface of

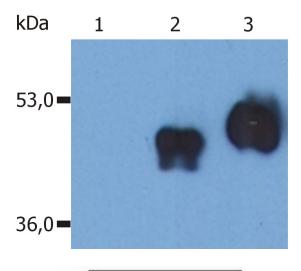
mature monocytes, macrophages, and neutrophils, where serves as a multifunctional lipopolysaccharide receptor; it is also released to the serum both as a secreted and enzymatically cleaved GPI-anchored form. CD14 binds lipopolysaccharide molecule in a reaction catalyzed by lipopolysaccharide-binding 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.

Synonyms: CD14

## **Product images:**



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

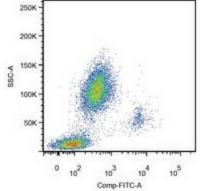


Figure 2. Surface staining of Human peripheral blood leukocytes using anti-Human CD14 antibody (clone MEM-18) FITC.