

11-212-C025

## Monoclonal Antibody to CD14 Purified Antibody (0.025 mg)

<b>Clone:</b>	MEM-18
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	<p>The 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.</p> <p>HLDA III; WS Code M 253 HLDA IV; WS Code M 314 HLDA V; WS Code M MA087 HLDA VI; WS Code M MA95</p>
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	A crude mixture of human urinary proteins precipitated by ammonium sulphate from the urine of a patient suffering from proteinuria.
<b>Species Reactivity:</b>	Human, Non-Human Primates
<b>Application:</b>	<p>Flow Cytometry Recommended dilution: 4 µg/ml Immunoprecipitation Western Blotting Application note: Non-reducing conditions. ELISA</p> <p>The antibody MEM-18 has been tested as the detection antibody in a sandwich ELISA for analysis of human CD14 in combination with antibody B-A8 (cat. no. 11-304-C100).</p> <p>Functional Application</p> <p>The antibody MEM-18 completely blocks binding of fluorescein (FITC) &amp;#8211; labeled bacterial LPS to the monocyte surface and it also blocks the binding of CD14 to the extracellular TLR2 domain.</p>
<b>Purity:</b>	> 95% (by SDS-PAGE)
<b>Purification:</b>	Purified by protein-A affinity chromatography
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label

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**Antibodies****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.

**References:**

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- \*And other.

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