EXBIO Antibodies

PRODUCT DATA SHEET

11-212-C025

Monoclonal Antibody to CD14
Purified Antibody (0.025 mg)

Clone: MEM-18

Isotype: Mouse IgG1

Specificity: 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.
HLDA III; WS Code M 253
HLDA IV; WS Code M 314
HLDA V; WS Code M MA087
HLDA VI; WS Code M MA95

Immunogen: A crude mixture of human urinary proteins precipitated by ammonium sulphate from the urine of a patient suffering from proteinuria.

Species Reactivity: Human, Non-Human Primates

Application: Flow Cytometry
Recommended dilution:4 µg/ml
Immunoprecipitation
Western Blotting
Application note: 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 antibody B-A8 (cat. no. 11-304-C100).
Functional Application
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.

Purity: > 95% (by SDS-PAGE)

Purification: Purified by protein A

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

Expiration: See vial label

Lot Number: See vial label

For laboratory research only, not for drug, diagnostic or other use.

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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.

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*And other.

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