

Antibodies

Anti-Human CD14 Antibody, Clone M5E2

Mouse monoclonal IgG2a antibody
against human, rhesus, cynomolgus
CD14, unconjugated

Catalog #60004

100 µg 0.5 mg/mL



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Product Description

The M5E2 antibody reacts with CD14, an ~53 - 55 kDa GPI-anchored transmembrane glycoprotein expressed at high levels on the surface of peripheral blood monocytes and macrophages, and at lower levels on granulocytes. An ~10-fold difference in expression levels between monocytes/macrophages and granulocytes makes CD14 a useful marker for distinguishing these cell populations. CD14 is also found on tissue macrophages, Langerhans cells and dendritic cells. CD14 functions as a high-affinity receptor for complexes of lipopolysaccharide (LPS) and serum LPS-binding protein and modulates LPS-dependent signal transduction during the immune response to gram-negative pathogens by acting as a co-receptor for TLR 4 and MD-2. This triggers activation of NF-kappa-B, cytokine secretion, and induction of the inflammatory response. Two soluble forms of CD14 have also been described (~48 and ~55 kDa).

Target Antigen Name:	CD14
Alternative Names:	LPS receptor
Gene ID:	929
Species Reactivity:	Human, Rhesus, Cynomolgus, Chimpanzee, Capuchin Monkey, Common Marmoset, Cotton-topped Tamarin, Pigtailed Macaque, Squirrel Monkey, Cow, Dog, Pig, Sheep
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	M5E2
Isotype:	IgG2a, kappa
Immunogen:	Full-length human CD14 protein
Conjugate:	Unconjugated

Applications

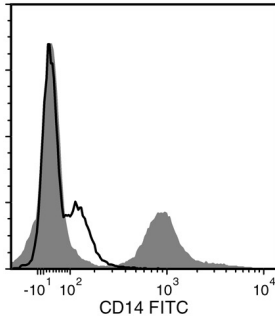
Verified:	FC
Reported:	Blocking, CyTOF®, FA, FC, ICC, IF, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human Myeloid Positive Selection Kit (Catalog #18653) and EasySep™ Human CD14 Positive Selection Kit (Catalog #18058), as well as EasySep™ HLA Whole Blood CD33 Positive Selection Kit (Catalog #18287HLA), EasySep™ HLA Whole Blood Myeloid Positive Selection Kit (Catalog #18683HLA), and EasySep™ Human Buffy Coat CD14 Positive Selection Kit (Catalog #18088).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 2 µg per 1 × 10 ⁶ cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application. Clone M5E2 is not recommended for IHC with formalin-fixed, paraffin-embedded sections.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD14 Antibody, Clone M5E2, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138F1) (filled histogram), or Mouse IgG2a, kappa Isotype Control Antibody, Clone MOPC-173 (Catalog #60071), followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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