

Product datasheet

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ARG53767 anti-CD14 antibody [MEM-18] (PE)

Package: 100 tests Store at: 4°C

Summary

Product Description PE-conjugated Mouse Monoclonal antibody [MEM-18] recognizes CD14

Tested Reactivity Hu, NHuPrm

Tested Application FACS

Specificity The clone 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

Host Mouse

Clonality Monoclonal

Clone MEM-18

Isotype IgG1

Target Name CD14

Species Human

Immunogen A crude mixture of human urinary proteins precipitated by ammonium sulphate from the urine of a

patient suffering from proteinuria.

Conjugation PE

Alternate Names CD antigen CD14; Myeloid cell-specific leucine-rich glycoprotein; Monocyte differentiation antigen

CD14

Application Instructions

Application table	Application	Dilution
	FACS	20 μl / 10^6 cells

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations

should be determined by the scientist.

Properties

Form Liquid

Purification Note The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The

conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is

necessary.

Buffer PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA

Preservative 15 mM Sodium azide

Stabilizer 0.2% (w/v) high-grade protease free BSA

Storage instruction Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

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

Bioinformation

Database links <u>GeneID: 929 Human</u>

Swiss-port # P08571 Human

Gene Symbol CD14

Gene Full Name CD14 molecule

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.

Function In concert with LBP, binds to monomeric lipopolysaccharide and delivers it to the MD-2/TLR4 complex,

thereby mediating the innate immune response to bacterial lipopolysaccharide (LPS). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response.

Up-regulates cell surface molecules, including adhesion molecules. [UniProt]

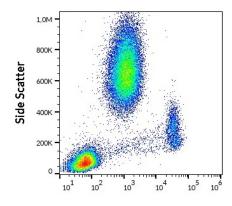
Research Area Developmental Biology antibody; Immune System antibody; General Lymphocyte Marker Study

antibody; Macrophages and neutrophils antibody

Calculated Mw 40 kDa

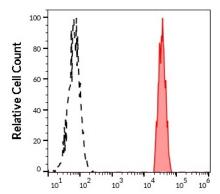
PTM N- and O- glycosylated. O-glycosylated with a core 1 or possibly core 8 glycan.

Images



ARG53767 anti-CD14 antibody [MEM-18] (PE) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG53767 anti-CD14 antibody [MEM-18] (PE) (20 μl reagent / 100 μl of peripheral whole blood).



ARG53767 anti-CD14 antibody [MEM-18] (PE) FACS image

Flow Cytometry: Separation of human monocytes (red-filled) from lymphocytes (black-dashed). Human peripheral whole blood stained with ARG53767 anti-CD14 antibody [MEM-18] (PE) (20 μ l reagent / 100 μ l of peripheral whole blood).