ARG53768
anti-CD14 antibody [MEM-15] (PE)

Package: 100 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [MEM-15] recognizes CD14
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS
Specificity	The clone MEM-15 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. MEM-15 also reacts with soluble forms of CD14 found in serum and in the urine of some nephrotic patients. HLDA III; WS Code M 252 HLDA IV; WS Code M 113 HLDA IV; WS Code NL 90 HLDA IV; WS Code T 53 HLDA V; WS Code M MA086 HLDA VI; WS Code M MA94
Host	Mouse
Clonality	Monoclonal
Clone	MEM-15
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

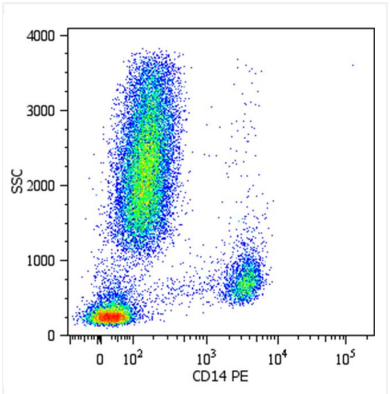
Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

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	GeneID: 929 Human 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



ARG53768 anti-CD14 antibody [MEM-15] (PE) FACS image

Flow Cytometry: Human peripheral blood cells stained with ARG53768 anti-CD14 antibody [MEM-15] (PE).