

Product datasheet

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ARG62727 anti-CD14 antibody [B-A8]

Package: 100 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [B-A8] recognizes CD14

Tested Reactivity Hu

Tested Application ELISA, FACS, ICC/IF, IHC-P

Specificity The clone B-A8 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.

Host Mouse

Clonality Monoclonal

Clone B-A8

Isotype IgG1

Target Name CD14

Species Human

Immunogen Human monocytes

Conjugation Un-conjugated

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

CD14

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	FACS	1 μg/ml
	ICC/IF	1:50 - 1:100
	IHC-P	2 - 10 μg/ml
	ELISA: The clone B-A8 has been tested as the capture antibody in a sandwich ELISA for analysis of human CD14 in combination with antibody MEM-18 (ARG62725). IHC-P: Heat retrieval of antigen is recommeded. Staining on human PML brain sections was mainly observed on monocytes in the lumenal side of brain blood vessels, and on some perivascular cells adjacent to medium-sized vessels. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	IHC-P: PML brain section	

Properties

Form	Liquid

Purification Purified by protein A

Purity > 95% (by SDS-PAGE)

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. 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.

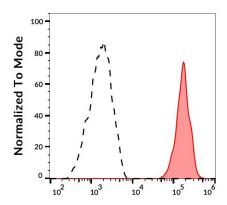
Up-regulates cell surface molecules, including adhesion molecules. [UniProt]

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.



ARG62727 anti-CD14 antibody [B-A8] FACS image

Flow Cytometry: Separation of human monocytes (red-filled) from lymphocytes (black-dashed). Human peripheral whole blood stained with ARG62727 anti-CD14 antibody [B-A8] at 1.7 μ g/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.