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

Application Note: 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

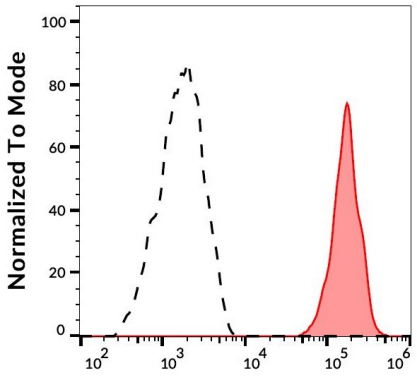
Form	Liquid

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	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



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 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.