ARG23019
anti-CD14 antibody [CC-G33] (FITC)

Package: 50 µg
Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [CC-G33] recognizes CD14 Mouse anti Bovine CD14, clone CC-G33 is a monoclonal antibody recognizing bovine CD14, a GPI-anchored membrane glycoprotein and monocyte/macrophage differentiation antigen, belonging to the lipopolysaccharide receptor family, also expressed weakly on microglia and Langerhans cells.CD14 acts as a receptor for the potent bacterial endotoxin, lipopolysaccharide (LPS), facilitated by LPS-binding protein (LBP). The binding of LPS to CD14 results in cell activation and the release of cytokines and the inflammatory response, and has been shown to upregulate the cell surface expression of adhesion molecules.Mouse anti Bovine CD14 clone CC-G33 cross-reacts with human CD14 expressed on transfected COS-7 cells, and also recognises an epitope on ovine CD14, see Sopp et al. 1996 for details. CC-G33 has also been shown to be reactive with CD14 from the Water buffalo (Bubalus bubalis), see Mirielli et al. 2013.
Tested Reactivity	Hu, Bov, Sheep
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	CC-G33
Isotype	IgG1
Target Name	CD14
Species	Bovine
Immunogen	Partially purified polypeptides isolated from Bovine leucocyte cell surface membrane.
Conjugation	FITC
Alternate Names	CD antigen CD14; Myeloid cell-specific leucine-rich glycoprotein; Monocyte differentiation antigen CD14

Application Instructions

Application table

Application	Dilution
FACS	Assay-dependent

Application Note: FACS: Use 10 µl of the suggested working dilution to label 10^6 cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

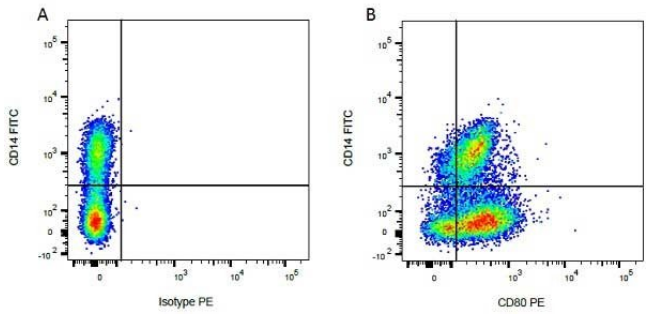
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS, 0.09% Sodium azide and 1% BSA
Preservative	0.09% Sodium azide

Stabilizer	1% BSA
Concentration	0.1 mg/ml
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

Gene Symbol	CD14
Gene Full Name	CD14 molecule
Background	The protein encoded by this gene is a surface antigen that is preferentially expressed on monocytes/macrophages. It cooperates with other proteins to mediate the innate immune response to bacterial lipopolysaccharide. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Mar 2010]
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



ARG23019 anti-CD14 antibody [CC-G33] (FITC) FACS image

Flow Cytometry: Figure A. ARG23019 anti-CD14 antibody [CC-G33] (FITC) and RPE conjugated mouse IgG1 isotype control. Figure B. ARG23019 anti-CD14 antibody [CC-G33] (FITC) and RPE conjugated mouse anti bovine CD80. All experiments performed on red cell lysed bovine blood gated on mononuclear cells.