APC-Labeled Monoclonal Anti-Human CD14 Antibody, Mouse IgG1 (20F9E3) (0.03% Proclin)

Catalog # CD4-AMY2061

Source

Monoclonal Anti-Human CD14 Antibody, Mouse IgG1 (20F9E3) is a mouse monoclonal antibody recombinantly expressed from HEK293 cells, which provides higher batch consistency and long term security of supply.

Antibody Type

Recombinant Monoclonal

Clone

20F9E3

Isotype

Mouse IgG1, Kappa

Host Species

Mouse

Reactivity

Human

Immunogen

Purified Human CD14 Protein

Conjugate

APC

Excitation Wavelength: 640 nm

Emission Wavelength: 661 nm

Specificity

This product is a specific antibody specifically reacts with CD14 protein.

Application

Flow Cytometry (Evaluation of the expression of CD14 on Human cells).

Recommended Dilution

1:50

Isotype Control

The isotype control is sold separately; please refer to Cat. No. **DNP-AFM1** for product information.

Form

Lyophilized

Formulation

Lyophilized from a 0.22 μm-filtered solution in PBS (pH 7.4) containing 0.03% ProClin 300 and 0.2% BSA, with trehalose as protectant.

Please contact us for customized product forms or formulations.

Reconstitution

Please refer to the Certificate of Analysis (CoA) for specific instructions.

Shipping

Lyophilized product is shipped at ambient temperature.

Storage

For long term storage, the product should be stored in a lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;

- -70°C for 12 months after reconstitution.
- 2-8 °C for 12 months after reconstitution.

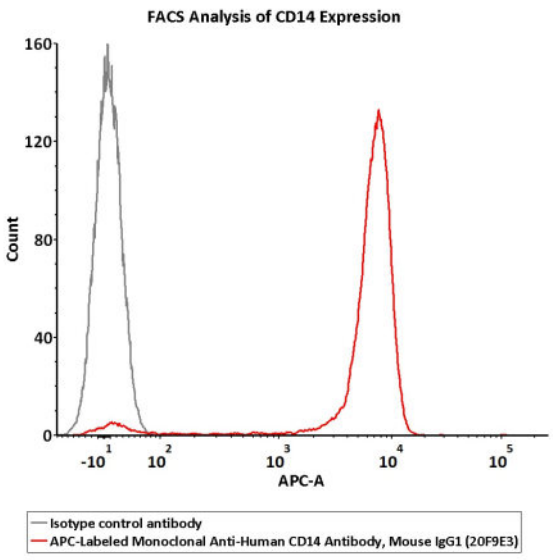
Notices

Product Specific Notices: For research use only.

ACRO Quality Management System

- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

Bioactivity-FACS



Flow cytometric analysis of Human peripheral blood monocytes staining with APC-Labeled Monoclonal Anti-Human CD14 Antibody, Mouse IgG1 (20F9E3) (Cat. No. CD4-AMY2061) at 1:50 dilution (2 μL of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100 μL), compared with isotype control antibody. APC signal was used to evaluate the binding activity (QC tested).

Background

Cluster of differentiation 14 (CD14), is a cell surface glycoprotein, and is a is a component of the innate immune system. CD14 is a myelomonocytic differentiation antigen preferentially expressed on monocytes, macrophages, and activated granulocytes. CD14 exists in two forms. Either it is anchored into the membrane by a glycosylphosphatidylinositol tail (mCD14) or it appears in a soluble form (sCD14). Soluble CD14 either appears after shedding of mCD14 (48 kDa) or is directly secreted from intracellular vesicles (56 kDa). CD14 acts as a co-receptor (along with the Toll-like receptor TLR 4 and MD-2) for the detection of bacterial lipopolysaccharide (LPS). CD14 can bind LPS only in the presence of lipopolysaccharide-binding protein (LBP). CD14 has been proposed to be involved in various biological processes, including transportation of other lipids, cell-cell interaction during different immune responses, as well as recognition of apoptotic cells. Although LPS is considered its main ligand, CD14 also recognizes other pathogen-associated molecular patterns. CD14+ cells are monocytes that can differentiate into a host of different cells. CD14 has been shown to interact with Lipopolysaccharide-binding protein.