

Technical Data Sheet

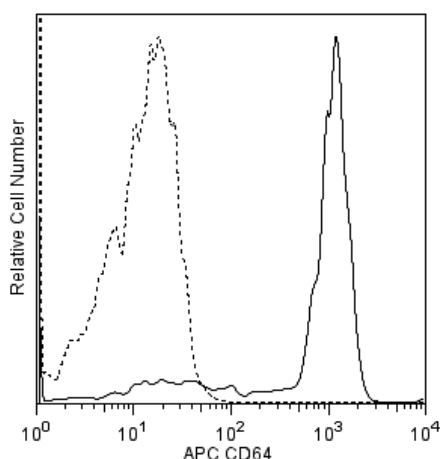
APC Mouse anti-Human CD64

Product Information

Material Number:	561189
Alternate Name:	FCGR1; FcRI; Fc-gamma RI; IgG Fc Receptor I; High affinity IgG FcRI
Size:	50 tests
Vol. per Test:	5 µl
Clone:	10.1
Immunogen:	Human rheumatoid synovial fluid cells and fibronectin-purified monocytes
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VI MA36
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 10.1 monoclonal antibody specifically binds to CD64, a 75 kDa type I transmembrane glycoprotein that is a high affinity receptor for human IgG (FcγRI), especially the IgG1 and IgG3 subclasses. CD64 is expressed on monocytes, macrophages, dendritic cells, granulocytes activated with interferon-gamma and early myeloid lineage cells. CD64 associates with a signaling FcγR homodimer to form the functional high affinity FcγRI complex. CD64 functions in both innate and adaptive immune responses and mediates endocytosis, phagocytosis, antibody-dependent cellular toxicity, cytokine release and superoxide generation.



Flow cytometric analysis of CD64 expression on human peripheral blood monocytes. Whole blood was stained with APC Mouse Anti-Human CD64 antibody (Cat. No. 561189; solid line histogram) or with a APC Mouse IgG1, κ Isotype Control (Cat. No. 554681; dashed line histogram). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable monocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554681	APC Mouse IgG1 κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
5. An isotype control should be used at the same concentration as the antibody of interest.
6. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

References

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