

Technical Data Sheet

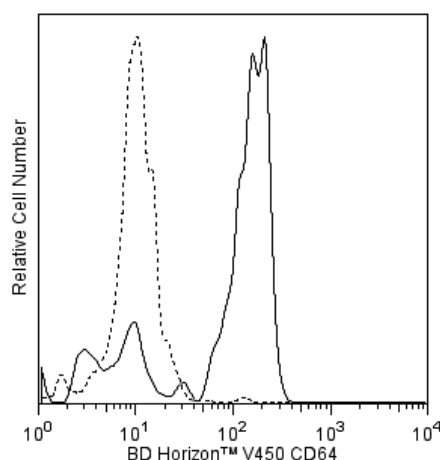
V450 Mouse anti-Human CD64**Product Information**

Material Number:	561202
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 protein stabilizer 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.

The antibody is conjugated to BD Horizon™ V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at 450 nm. Conjugates with BD Horizon™ V450 can be used in place of Pacific Blue™ conjugates.



Flow cytometric analysis of CD64 expression on human peripheral blood monocytes. Whole blood was stained with BD Horizon™ V450 Mouse Anti-Human CD64 antibody (Cat. No. 561202; solid line histogram) or with a BD Horizon™ V450 Mouse IgG1, κ Isotype Control (Cat. No. 560373; 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 with BD Horizon™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was removed.

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

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
560373	V450 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 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. An isotype control should be used at the same concentration as the antibody of interest.
3. BD Horizon™ V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
4. 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.
5. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
7. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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