Technical Data Sheet

FITC Mouse Anti-Human CD64

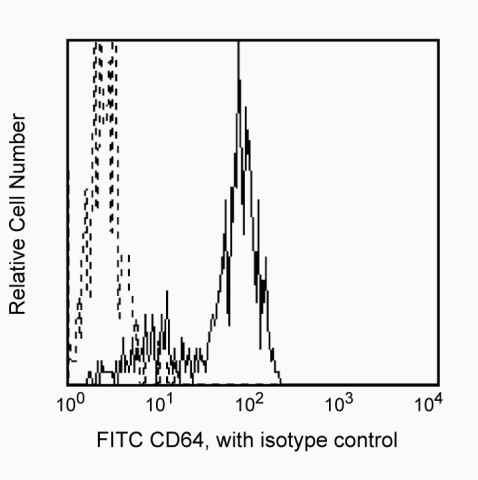
Product Information

Material Number:	**555527**
Size:	100 tests
Vol. per Test:	20 µl
Clone:	10.1
Isotype:	Mouse IgG1 κ
Reactivity:	QC Testing: Human
Workshop:	VI MA36
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The monoclonal antibody 10.1 reacts with CD64, a 75 kD type I transmembrane glycoprotein that is a high affinity receptor for IgG (FcγRI). CD64, a key receptor in the development of immune responses, has a dual role as a low affinity receptor for IgG3 and high affinity receptor for IgG2a linking innate and adaptive immunities. CD64 mediates endocytosis, phagocytosis, antibody-dependent cellular toxicity, cytokine release and superoxide generation. CD64 is expressed largely on macrophages and dendritic cells.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of peripheral blood monocytes analyzed on a FACScan (BDIS, San Jose, CA)

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.
Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application	
Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555748	FITC Mouse IgG1 κ Isotype Control	100 tests	MOPC-21

BD Biosciences
bdbiosciences.com

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 cells in a 100-µl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Kishimoto T, von dem Borne AEG, Goyert SM,et al., ed. *Leucocyte Typing VI: White Cell Differentiation Antigens.* London: Garland Publishing; 1997. (Clone-specific)

Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V*. New York: Oxford University Press; 1995.(Biology)

Dougherty GJ, Selvendran Y, Murdoch S, Palmer DG, Hogg N. The human mononuclear phagocyte high-affinity Fc receptor, FcRI, defined by a monoclonal antibody, 10.1. *Eur J Immunol.* 1987; 17(10):1453-1459.(Biology)

Indik ZK, Hunter S, Huang MM, et al. The high affinity Fc gamma receptor (CD64) induces phagocytosis in the absence of its cytoplasmic domain: the gamma subunit of Fc gamma RIIIA imparts phagocytic function to Fc gamma RI. *Exp Hematol.* 1994; 22(7):599-606.(Biology)