Product Data Sheet

PE/Dazzle™ 594 anti-mouse CD64 (FcγRI)

Catalog # / Size: 1296595 / 25 μg

1296600 / 100 µg

Clone: X54-5/7.1

Isotype: Mouse IgG1, κ

Immunogen: BALB/c mouse FcγRI-human IgG Fc

fusion protein.

Reactivity: Mouse

Preparation: The antibody was purified by affinity

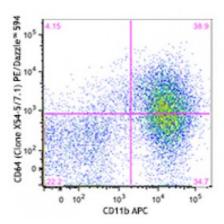
chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



C57BL/6 mouse bone marrow cells were stained with CD11b (clone M1/70) APC and CD64 (clone X54-5/7.1) PE/Dazzle™ 594 (top) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application Notes:

The X54-5/7.1 antibody reacts with mouse strains carrying CD64a and b alleles but not CD64d. X54-5/7.1 recognizes a conformational

determinant formed between domains 2 and 3. Additional reported application

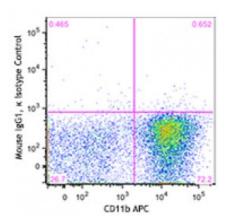
(for relevant formats) include:

immunoprecipitation1. Clone X54-5/7.1 is not found to be useful for Western

blots1.

Application References:

- 1. Tan PS, et al. 2003. J. Immunol. 170:2549. (IP)
- 2. Ingersoll MA, et al. 2010. Blood 115:e10. (FC)
- 3. Ozeri E, et al. 2012. J. Immunol. 189:146. PubMed
- 4. Richardson ML, et al. 2014. PLoS Negl Trop Dis. 8:2825. PubMed



Description:

CD64 is a 72 kD single chain type I glycoprotein also known as FcγRI and FcRI. CD64 is a member of the immunoglobulin superfamily and is expressed on monocytes/macrophages, dendritic cells, and mast cells. The expression can be upregulated by IFN-γ stimulation. CD64 binds IgG immune complex. It plays a role in antigen capture, phagocytosis of IgG/antigen complexes, and antibody-dependent cellular cytotoxicity (ADCC).