SONY

Product Data Sheet

PE/Cy7 anti-mouse CD64 (FcγRI)

Catalog # / Size: 1296570 / 100 µg
1296565 / 25 µg

Clone: X54-5/7.1

Isotype: Mouse IgG1, κ

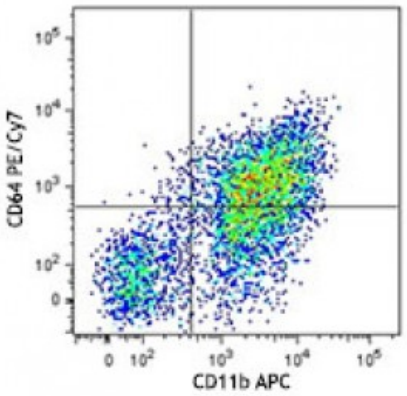
Immunogen: BALB/c mouse FcγRI-human IgG Fc fusion protein.

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2



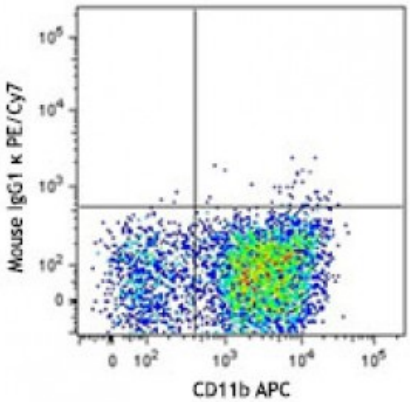
C57BL/6 mouse bone marrow cells were stained with CD11b APC and CD64 (clone X54-5/7.1) PE/Cy7 (top) or mouse IgG1, κ PE/Cy7 isotype control (bottom). Data shown was gated on myeloid cell population.

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.

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).