SONY

# Product Data Sheet

## APC anti-mouse CD64 (FcγRI)

**Catalog # / Size:** 1296525 / 25 µg
1296530 / 100 µg

**Clone:** X54-5/7.1

**Isotype:** Mouse IgG1, κ

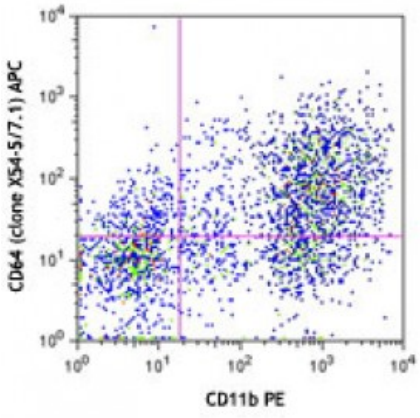
**Immunogen:** BALB/c mouse FcγRI-human IgG Fc fusion protein.

**Reactivity:** Mouse

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

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

**Concentration:** 0.2

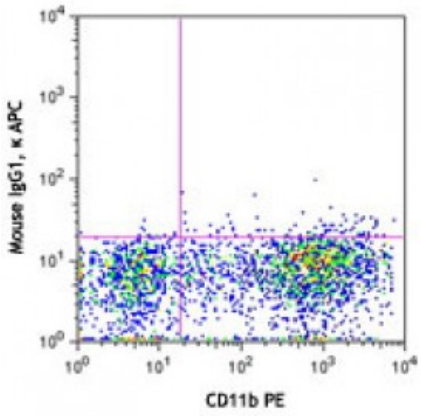



C57BL/6 mouse bone marrow cells were stained with CD11b PE and CD64 (clone X54-5/7.1) APC (top) or mouse IgG1, κ APC isotype control (bottom). Data shown was gated on the myeloid population.

## 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 ≤1.0 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. Zhou Q, *et al.* 2014. *J Immunol.* 193:496. 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).