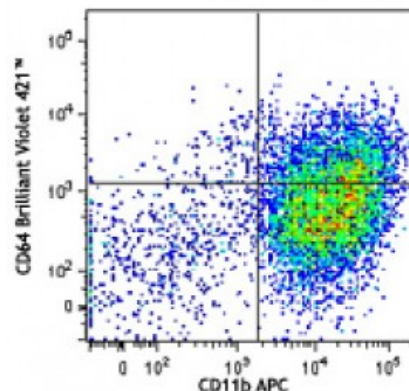


**Brilliant Violet 421™ anti-mouse CD64 (FcγRI)**

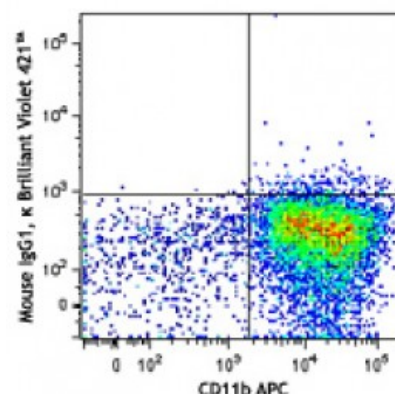
<b>Catalog # / Size:</b>	1296545 / 50 µg
<b>Clone:</b>	X54-5/7.1
<b>Isotype:</b>	Mouse IgG1, κ
<b>Immunogen:</b>	BALB/c mouse FcγRI-human IgG Fc fusion protein.
<b>Reactivity:</b>	Mouse
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
<b>Concentration:</b>	0.2



C57BL/6 mouse bone marrow cells were stained with CD11b APC and CD64 (clone X54-5/7.1) Brilliant Violet 421™ (top) or mouse IgG1, κ Brilliant Violet 421™ isotype control (bottom). Data shown was gated on myeloid cell population.

**Applications:**

<b>Applications:</b>	Flow Cytometry
<b>Recommended Usage:</b>	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 ≤0.75 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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**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: immunoprecipitation<sup>1</sup>. Clone X54-5/7.1 is not found to be useful for Western blots<sup>1</sup>.

**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](#)

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**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).