

**Alexa Fluor® 647 anti-mouse CD172a (SIRPα)**

**Catalog # / Size:** 1320135 / 25 µg  
1320140 / 100 µg

**Clone:** P84

**Isotype:** Rat IgG1, κ

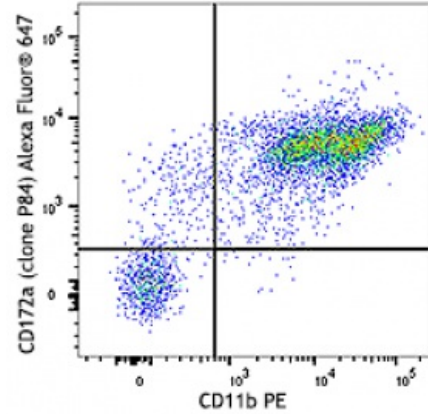
**Immunogen:** Mouse brain membrane protein

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

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

**Concentration:** 0.5 mg/ml

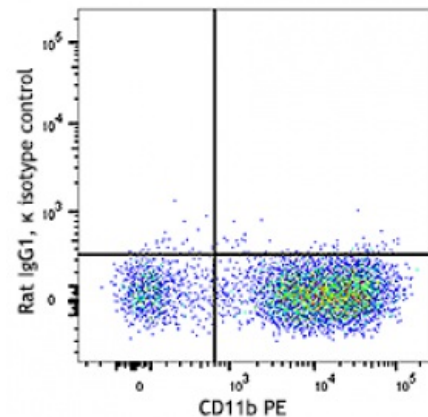


C57BL/6 mouse bone marrow cells were stained with CD11b PE and CD172a (clone P84) Alexa Fluor® 647 (top) or rat IgG1, κ Alexa Fluor® 647 isotype control (bottom). Data shown was gated on myeloid cell population.

**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 ≤ 0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.



\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: blocking SIRPα interaction with CD47<sup>4</sup>, *in vivo* blocking of dendritic cell migration<sup>3</sup>, enhancing of macrophage phagocytosis<sup>2,4</sup>, immunohistochemical staining of cerebellum frozen sections<sup>1</sup>, and immunoprecipitation<sup>2,4</sup>.

- Application References:**
1. Zhao XW, *et al.* 2011. *P. Natl. Acad. Sci. USA* 108:18342.
  2. Verjan-Garcia N, *et al.* 2011. *J. Immunol.* 187:2268.
  3. Sato-Hashimoto M, *et al.* 2011. *J. Immunol.* 187:291.
  4. Raymond M,

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**Description:** CD172a, also known as SIRP $\alpha$ , is a type I transmembrane protein with one V-set Ig-like and two C-set Ig-like domains in the extracellular portion, and two ITIM motifs and a proline-rich region in the cytoplasmic tail. CD172a is expressed by monocytes, macrophages, myeloid cells, and neuronal tissue. The phosphorylation of SIRP $\alpha$  ITIMs induces the recruitment and activation of the tyrosine phosphatases PTPN6 and PTPN11, resulting in the negative regulation of several biological processes. The ligands of CD172a are CD47, SP-A, and SP-D.

**Antigen**  
**References:**

1. Zhao XW, *et al.* 2011. *P. Natl. Acad. Sci. USA* 108:18342.
2. Verjan-Garcia N, *et al.* 2011. *J. Immunol.* 187:2268.
3. Sato-Hashimoto M, *et al.* 2011. *J. Immunol.* 187:291.
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