

Alexa Fluor® 647 anti-mouse CD172a (SIRPα)

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

Clone: P84

Isotype: Rat IgG1, κ

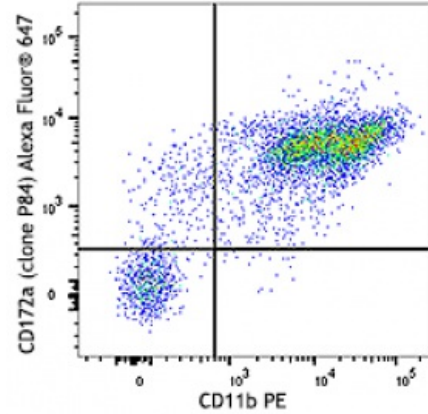
Immunogen: Mouse brain membrane protein

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

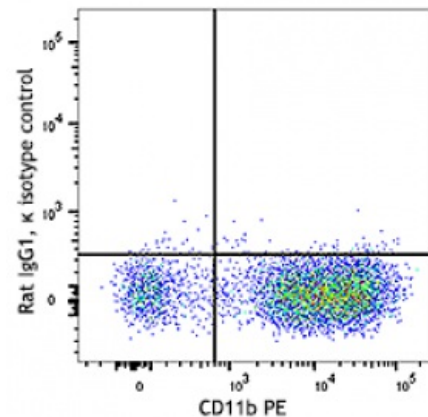


C57BL/6 mouse bone marrow cells were stained with CD11b PE and CD172a (clone P84) Alexa Fluor® 647 (top) or rat IgG1, κ Alexa Fluor® 647 isotype control (bottom). Data shown was gated on myeloid cell population.

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 CD47⁴, *in vivo* blocking of dendritic cell migration³, enhancing of macrophage phagocytosis^{2,4}, immunohistochemical staining of cerebellum frozen sections¹, and immunoprecipitation^{2,4}.

- 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,

Description: CD172a, also known as SIRP α , 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 α 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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