

PE/Dazzle™ 594 anti-mouse CD172a (SIRPα)

Catalog # / Size: 1320075 / 25 µg
1320080 / 100 µg

Clone: P84

Isotype: Rat IgG1, κ

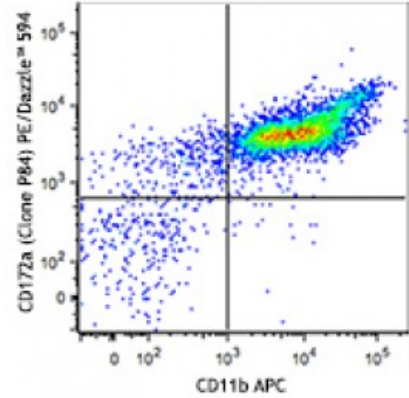
Immunogen: Mouse brain membrane protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

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

Concentration: 0.2

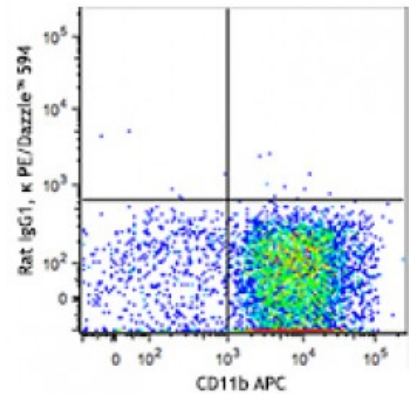


C57BL/6 mouse bone marrow cells were stained with CD11b APC and CD172a (clone P84) PE/Dazzle™ 594 (top) or rat IgG1, κ PE/Dazzle™ 594 isotype control (bottom). Data shown was gated on the myeloid cell population.

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.



* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 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. Comu S, *et al.* 1997. *J. Neurosci.* 17:8702. (IHC)
 2. Gresham HD, *et al.* 2000. *J. Exp. Med.* 191:515. (IP)
 3. Fukunaga A, *et al.* 2004. *J. Immunol.* 172:4091. (Block)
 4. Oldenborg PA, *et al.* 2000. *Science* 288:2051. (Block, IP)

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.
4. Raymond M,